“Sovereign Wealth Fund “Samruk-Kazyna” JSC

Consolidated financial statements

For the year ended December 31, 2021
with independent auditor’s report

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«Эрнст энд Янг» ЖШС
Әл-Фараби д-лы, 77/7
«Есентай Тауэр» ғимараты
Алматы қ., 050060
Қазақстан Республикасы
Тел.: +7 727 258 59 60
Факс: +7 727 258 59 61
www.ey.com/kz

ТОО «Эрнст энд Янг»
пр. Аль-Фараби, д. 77/7
здание «Есентай Тауэр»
г. Алматы, 050060
Республика Казахстан
Тел.: +7 727 258 59 60
Факс: +7 727 258 59 61
www.ey.com/kz

Ernst & Young LLP
Al-Farabi ave., 77/7
Esentai Tower
Almaty, 050060
Republic of Kazakhstan
Tel.: +7 727 258 59 60
Fax: +7 727 258 59 61
www.ey.com/kz

Independent Auditor's Report

To the Shareholder and Management of "Sovereign Wealth Fund "Samruk-Kazyna" JSC

Opinion

We have audited the consolidated financial statements of "Sovereign Wealth Fund "Samruk-Kazyna" JSC and its subsidiaries (hereinafter - the Group), which comprise the consolidated statement of financial position as at 31 December 2021, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2021 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' (IESBA) International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Kazakhstan, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements section* of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

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Key audit matter	How our audit addressed the key audit matter
Impairment of non-current assets	
We considered this matter to be one of most significance in the audit due to the high level of subjectivity in respect of assumptions underlying impairment analysis of non-current assets and significant judgements and estimates made by the management. In addition, increased cost of debt and uncertainty regarding future economic growth affects the Group's business prospects and triggers potential impairment of the Group's assets. Significant assumptions included discount rates, commodities prices, tariffs forecasts, inflation and exchange rate forecasts. Significant estimates included production forecasts, future capital expenditures and commodity reserves available for development and production. Information on non-current assets and the impairment tests performed is disclosed in *Note 4* to the consolidated financial statements.	We obtained management's impairment analysis, including analysis of impairment indicators and impairment test models. We involved business valuation specialists in the testing of the impairment analysis and calculation of recoverable amounts performed by the management. We analysed the assumptions underlying management forecast. We compared natural resource and commodity prices used in the calculation of recoverable amounts to available market forecasts. We compared the discount rate and long-term growth rates to general market indicators and other available information. We tested the mathematical accuracy of the impairment models and assessed their sensitivity to changes in assumptions. We analysed the disclosures made in the consolidated financial statements in respect of impairment.
Compliance with loan covenants	
In accordance with the terms of certain financing arrangements, the Group should comply with certain loan covenants. Breaching covenants could result in significant fines and penalties along with funding shortages. In addition, cross default provisions are in place under many of the Group's financing arrangements. Compliance with covenants was one of the matters of most significance in the audit since it can have a major impact on the going concern assumption used in the preparation of the consolidated financial statements, and on classification of interest-bearing liabilities in the consolidated statement of financial position. Information on compliance with covenants is disclosed in *Note 18* to the consolidated financial statements.	We examined the terms of financing arrangements on covenants including additional clauses on cross default conditions. We compared data used in the calculations with the financial statements. We assessed arithmetic accuracy of financial covenants calculations. We analysed the forecast made on approved budgets as of 31 December 2021, if a breach is likely in the next 12 months, we obtained and analysed management's analysis for the potential impact on going concern. We analysed communication with creditors in respect of compliance with covenants as at 31 December 2021. We also analysed the information disclosed in the consolidated financial statements.

Other information included in the Group's 2021 Annual Report

Other information consists of the information included in the Group's 2021 Annual Report other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Group's 2021 Annual Report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of management and the Audit Committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

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The partner in charge of the audit resulting in this independent auditor's report is Adil Syzdykov.

Ernst & Young LLP

Adil Syzdykov
Auditor

Auditor qualification certificate
No. МФ-0000172 dated 23 December 2013

Rustamzhan Sattarov
General director
Ernst & Young LLP

State audit license for audit activities on the territory of the Republic of Kazakhstan: series МФЮ-2 No. 0000003 issued by the Ministry of finance of the Republic of Kazakhstan on 15 July 2005

050060, Republic of Kazakhstan, Almaty
Al-Farabi ave., 77/7, Esentai Tower

22 April 2022

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at December 31

In millions of tenge	Note	2021	2020
Assets			
Non-current assets			
Property, plant and equipment	6	**14,264,058**	13,703,885
Intangible assets	7	**2,004,032**	2,022,024
Exploration and evaluation assets	8	**278,949**	367,393
Investment property		**37,014**	40,560
Investments in joint ventures and associates	9	**5,681,234**	4,985,676
Loans issued and finance lease receivables	10	**357,413**	366,830
Amounts due from credit institutions	11	**104,803**	135,315
Deferred tax assets	33	**69,148**	79,267
Other non-current financial assets	12	**667,832**	614,382
Other non-current assets	13	**578,190**	447,907
		24,042,673	22,763,239
Current assets			
Inventories	14	**728,897**	626,363
VAT receivable		**168,889**	256,319
Income tax prepaid		**55,513**	97,503
Trade accounts receivable	15	**1,024,892**	667,107
Loans issued and finance lease receivables	10	**46,703**	55,406
Amounts due from credit institutions	11	**671,859**	354,257
Other current financial assets	12	**506,895**	188,427
Other current assets	15	**209,986**	184,769
Cash and cash equivalents	16	**2,810,730**	2,227,669
		6,224,364	4,657,820
Assets classified as held for sale or distribution to the Shareholder	5	**42,721**	61,787
		6,267,085	4,719,607
Total assets		**30,309,758**	27,482,846

The accounting policies and explanatory notes on pages 9 through 103 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (continued)

In millions of tenge	Note	2021	2020
Equity and liabilities			
Equity attributable to equity holder of the Parent			
Share capital	17.1	**5,268,580**	5,258,657
Currency translation reserve	17.9	**1,894,545**	1,763,499
Revaluation reserve of investments at fair value through other comprehensive income		**32,694**	31,464
Hedging reserve	17.10	**(48,906)**	(60,416)
Other capital reserves	17.11	**(16,984)**	(16,984)
Retained earnings		**8,125,704**	6,502,544
		15,255,633	13,478,764
Non-controlling interest	17.8	**1,917,459**	1,672,851
Total equity		**17,173,092**	15,151,615
Non-current liabilities			
Borrowings	18	**6,908,483**	6,608,990
Loans from the Government of the Republic of Kazakhstan	19	**569,105**	562,449
Lease liabilities	21	**379,985**	396,441
Provisions	22	**442,394**	386,921
Deferred tax liabilities	33	**1,333,617**	1,143,256
Employee benefit liabilities		**125,455**	120,943
Prepayment on oil supply agreements	20	**–**	185,680
Other non-current liabilities	23	**187,843**	138,085
		9,946,882	9,542,765
Current liabilities			
Borrowings	18	**954,209**	850,210
Loans from the Government of the Republic of Kazakhstan	19	**10,264**	30,773
Lease liabilities	21	**129,676**	118,878
Provisions	22	**100,348**	80,980
Employee benefit liabilities		**14,981**	14,051
Income taxes payable		**16,766**	10,567
Trade and other payables	24	**1,118,055**	828,258
Prepayment on oil supply agreements	20	**–**	97,882
Other current liabilities	24	**845,485**	752,031
		3,189,784	2,783,630
Liabilities associated with assets classified as held for sale or distribution to the Shareholder	5	**–**	4,836
		3,189,784	2,788,466
Total liabilities		**13,136,666**	12,331,231
Total equity and liabilities		**30,309,758**	27,482,846

Managing Director for Economy and Finance –
Member of the Management Board

Nazira Nurbayeva

Chief accountant

Almaz Abdrakhmanova

The accounting policies and explanatory notes on pages 9 through 103 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended December 31

In millions of tenge	Note	2021	2020
Revenue	25	**11,709,658**	8,556,009
Government grants		**54,614**	35,408
		11,764,272	8,591,417
Cost of sales	26	**(8,794,057)**	(6,618,721)
Gross profit		**2,970,215**	1,972,696
General and administrative expenses	27	**(449,492)**	(425,875)
Transportation and selling expenses	28	**(728,331)**	(670,549)
Impairment loss	29	**(129,783)**	(343,741)
Gain on disposal of subsidiaries		**2,203**	219
Operating profit		**1,664,812**	532,750
Finance costs	30	**(555,537)**	(608,953)
Finance income	31	**174,898**	180,188
Other non-operating loss		**(51,327)**	(59,795)
Other non-operating income		**95,242**	93,265
Share in profit of joint ventures and associates, net	32	**1,142,082**	641,608
Net foreign exchange (loss)/gain, net		**(777)**	50,094
Profit before income tax		**2,469,393**	829,157
Income tax expenses	33	**(561,036)**	(246,615)
Net profit for the year		**1,908,357**	582,542
Net profit for the year attributable to:			
Equity holder of the Parent		**1,629,216**	558,192
Non-controlling interest		**279,141**	24,350
		1,908,357	582,542

The accounting policies and explanatory notes on pages 9 through 103 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (continued)

In millions of tenge	Note	2021	2020
Other comprehensive income			
Other comprehensive income to be reclassified to profit or loss in subsequent periods			
Exchange differences on translation of foreign operations		**151,889**	516,078
Unrealized (loss)/gain from revaluation investments at fair value through other comprehensive income		**(389)**	1,962
Share of the other comprehensive income of associates and joint ventures	9	**2,382**	5,113
Gain/(loss) on transactions with hedge instruments	17.10	**15,888**	(10,425)
Net realized gain on investments at fair value through other comprehensive income		**840**	98
Tax effect on transactions of OCI components		**(12,620)**	(37,255)
Other comprehensive income to be reclassified to profit or loss in subsequent periods, net of tax		**157,990**	475,571
Other comprehensive income not to be reclassified to profit or loss in subsequent periods			
Share of the other comprehensive loss of associates and joint ventures	9	**(169)**	(285)
Actuarial loss on defined benefit plans		**(412)**	(8,295)
Tax effect on transactions of OCI components		**462**	–
Other comprehensive loss not to be reclassified to profit or loss in subsequent periods		**(119)**	(8,580)
Other comprehensive income for the year, net of tax		**157,871**	466,991
Total comprehensive income for the year, net of tax		**2,066,228**	1,049,533
Total comprehensive income for the year, attributable to:			
Equity holder of the Parent		**1,774,115**	984,022
Non-controlling interest		**292,113**	65,511
		2,066,228	1,049,533

Managing Director for Economy and Finance –
Member of the Management Board

Nazira Nurbayeva

Chief accountant

Almaz Abdrakhmanova

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CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended December 31

		Attributable to the equity holder of the Parent									
In millions of tenge	Note	Share capital	Additional paid-in capital	Revaluation reserve of investments at fair value through other comprehen-sive income	Currency translation reserve	Hedging reserve	Other capital reserves	Retained earnings	Total	Non-controlling interest	Total
Balance as at December 31, 2019		5,229,112	17,303	29,354	1,319,406	(46,726)	(16,984)	6,176,856	12,708,321	1,634,632	14,342,953
Net profit for the year		–	–	–	–	–	–	558,192	558,192	24,350	582,542
Other comprehensive income/(loss) for the year		–	–	2,272	443,608	(13,276)	–	(6,774)	425,830	41,161	466,991
Total comprehensive income/(loss) for the year		–	–	2,272	443,608	(13,276)	–	551,418	984,022	65,511	1,049,533
Issue of shares		29,545	–	–	–	–	–	–	29,545	18	29,563
Dividends		–	–	–	–	–	–	(120,000)	(120,000)	(65,695)	(185,695)
Other contributions of the Shareholder		–	(17,323)	–	–	–	–	1,205	(16,118)	–	(16,118)
Other transactions with the Shareholder		–	–	–	–	–	–	40,483	40,483	–	40,483
Other distributions to the Shareholder		–	–	–	–	–	–	(99,850)	(99,850)	–	(99,850)
Transfer of assets to the Shareholder		–	–	–	–	–	–	(24,809)	(24,809)	–	(24,809)
Discount on loans from the Government		–	–	–	–	–	–	(37,581)	(37,581)	–	(37,581)
Disposal of subsidiaries		–	–	–	–	–	–	–	–	(14,040)	(14,040)
Change in ownership interests of subsidiaries – disposal of interest that does not result in the loss of control		–	–	(170)	74	–	–	25,174	25,078	59,492	84,570
Reserve for put option of non-controlling interest holder of a subsidiary		–	–	–	–	–	–	(9,721)	(9,721)	(3,510)	(13,231)
Other equity movements		–	20	8	411	(414)	–	(631)	(606)	(3,557)	(4,163)
Balance as at December 31, 2020		5,258,657	–	31,464	1,763,499	(60,416)	(16,984)	6,502,544	13,478,764	1,672,851	15,151,615

The accounting policies and explanatory notes on pages 9 through 103 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)

		Attributable to the equity holder of the Parent								
In millions of tenge	Note	Share capital	Revaluation reserve of investments at fair value through other comprehensive income	Currency translation reserve	Hedging reserve	Other capital reserves	Retained earnings	Total	Non-controlling interest	Total
Balance as at December 31, 2020		5,258,657	31,464	1,763,499	(60,416)	(16,984)	6,502,544	13,478,764	1,672,851	15,151,615
Net profit for the year		–	–	–	–	–	1,629,216	1,629,216	279,141	1,908,357
Other comprehensive income for the year		–	1,230	130,449	11,960	–	1,260	144,899	12,972	157,871
Total comprehensive income for the year		–	1,230	130,449	11,960	–	1,630,476	1,774,115	292,113	2,066,228
Issue of shares	17.1	9,923	–	–	–	–	–	9,923	5,759	15,682
Dividends	17.2	–	–	–	–	–	(88,337)	(88,337)	(92,511)	(180,848)
Other transactions with the Shareholder	17.3	–	–	–	–	–	6,286	6,286	–	6,286
Other distributions to the Shareholder	17.4	–	–	–	–	–	(65,582)	(65,582)	–	(65,582)
Transfer of assets to the Shareholder	17.5	–	–	–	–	–	(37,434)	(37,434)	–	(37,434)
Discount on loans from the Government	17.6	–	–	–	–	–	(278)	(278)	–	(278)
Disposal of subsidiaries		–	–	–	–	–	–	–	1,225	1,225
Change in ownership interests of subsidiaries – disposal of interest that does not result in the loss of control	17.7	–	–	–	–	–	177,907	177,907	36,680	214,587
Other equity movements		–	–	597	(450)	–	122	269	1,342	1,611
Balance as at December 31, 2021		5,268,580	32,694	1,894,545	(48,906)	(16,984)	8,125,704	15,255,633	1,917,459	17,173,092

Managing Director for Economy and Finance –
Member of the Management Board

Nazira Nurbayeva

Chief accountant

Almaz Abdrakhmanova

The accounting policies and explanatory notes on pages 9 through 103 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended December 31

In millions of tenge	Note	2021	2020 (restated)*
Cash flows from operating activities			
Receipts from customers		**12,528,322**	9,236,272
Payments to suppliers		**(7,397,233)**	(5,349,378)
Payments to employees		**(1,114,920)**	(1,022,274)
Other taxes and payments		**(1,717,500)**	(1,308,729)
Receipts from suppliers under the arbitration decision	37	**112,058**	-
Operations with financial instruments (the Fund and Kazpost)		**13,690**	19,360
Short-term lease payments and variable lease payments		**(49,012)**	(57,634)
Proceeds from subsidized interest rates on financial liabilities		**–**	29,183
Return of VAT from the budget		**241,670**	110,054
Other payments		**(100,811)**	(157,836)
Income taxes paid		**(347,423)**	(214,006)
Interest paid		**(557,366)**	(520,080)
Interest received		**114,565**	146,453
Net cash flows received from operating activities		**1,726,040**	911,385
Cash flows from investing activities			
Acquisition of property, plant and equipment, and exploration and evaluation assets and other non-current assets		**(1,295,235)**	(1,061,691)
Acquisition of intangible assets		**(31,994)**	(23,036)
Proceeds from sale of property, plant and equipment		**36,956**	5,025
Proceeds from sale of other non-current assets		**47,662**	52,982
Dividends received from joint ventures and associates	9	**547,447**	246,164
Acqusition of subsidiaries, net of cash acquired with the subsidiary		**89**	(26,499)
(Issuance)/redemption of bank deposits, net		**(328,434)**	297,967
Loans issued		**(17,541)**	(14,237)
Proceeds from sale of subsidiaries, net of cash of disposed subsidiaries		**(27,819)**	11,657
Proceeds from sale/(acquisition) of joint ventures and associates, net		**12,181**	70,469
Additional contributions to share capital of joint ventures and associates without change in ownership	9	**(1,926)**	(22,227)
Repayment of loans issued		**30,480**	79,937
Acquisition of debt instruments		**(728,299)**	(312,747)
Proceeds from sale/repayment by issuers of debt instruments		**722,163**	108,983
Other payments		**(36,916)**	(7,375)
Net cash flows used in investing activities		**(1,071,186)**	(594,628)

The accounting policies and explanatory notes on pages 9 through 103 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS (continued)

In millions of tenge	Note	2021	2020 (restated)*
Cash flows from financing activities			
Proceeds from borrowings	18	**1,462,347**	1,859,611
Repayment of borrowings		**(1,171,065)**	(1,811,258)
Reservation of cash for payment of borrowings	18	**(292,258)**	–
Share buyback by subsidiary		**–**	(212)
Repayment of lease liabilities	21	**(121,314)**	(95,384)
Contributions to the share capital by the Equity holder of the Parent	17.1	**9,923**	26,000
Contributions by non-controlling interest		**792**	18
Distributions to the Shareholder		**(67,568)**	(59,852)
Dividends paid to non-controlling interest of subsidiaries	17.2	**(92,076)**	(72,054)
Disposal of interest that does not result in the loss of control	17.7	**247,474**	83,944
Dividends paid to the Shareholder	17.2	**(88,337)**	(120,000)
Bonds early extinguishment premium and fees paid	18	**–**	(45,278)
Other payments		**(2,120)**	(7,527)
Net cash flows used in financing activities		**(114,202)**	(241,992)
Net increase in cash and cash equivalents		**540,652**	74,765
Effects of exchange rate changes on cash and cash equivalents		**41,984**	158,524
Changes in cash and cash equivalents disclosed as part of assets held for sale		**979**	87
Change in allowance for expected credit losses		**(554)**	331
Cash and cash equivalents at the beginning of the year		**2,227,669**	1,993,962
Cash and cash equivalents at the end of the year	16	**2,810,730**	2,227,669

* *Certain numbers shown here do not correspond to the consolidated financial statements for the year ended December 31, 2020 and reflect adjustments made, refer to Note 2.*

Managing Director for Economy and Finance –
Member of the Management Board

Nazira Nurbayeva

Chief accountant

Almaz Abdrakhmanova

The accounting policies and explanatory notes on pages 9 through 103 form an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2021

1. GENERAL INFORMATION

Corporate information

"Sovereign Wealth Fund "Samruk-Kazyna" JSC (the "Fund" or "Samruk-Kazyna") was established on November 3, 2008 in accordance with the Decree of the President of the Republic of Kazakhstan dated October 13, 2008 and the Resolution of the Government of the Republic of Kazakhstan dated October 17, 2008. The formation was enacted by the merger of "Sustainable Development Fund "Kazyna" JSC ("Kazyna") and "Kazakhstan Holding Company for State Assets Management "Samruk" JSC ("Samruk") and the additional transfer to the Fund of interests in certain entities owned by the Government of the Republic of Kazakhstan (the "State" or the "Government"). The Government is the sole shareholder of the Fund (the "Shareholder" or the "Parent").

During this process the Government's overall objective was to increase management efficiency and to optimise organisational structures for them to successfully achieve their strategic objectives as set in the respective Government programs.

The Fund is a holding company combining companies listed in *Note 34* (the "Group"). Prior to February 1, 2012, the Fund's activities were governed by the Law of the Republic of Kazakhstan *On National Welfare Fund* No. 134-4 dated February 13, 2009 and were aimed to assist in provision of stable development of the state economy, modernization and diversification of economy, and improvement of the Group companies' efficiency. According to the Law of the Republic of Kazakhstan enacted on February 1, 2012 *On Sovereign Wealth* Fund No. 550-4, the Fund's activity is focused on improving sovereign wealth of the Republic of Kazakhstan by increasing the long-term value of the Group companies and by effective management of the Group assets.

For management purposes, the Group is organized into organizational business units based on their products and services, and has 8 (eight) reportable operating segments as follows *(Note 38)*:

- Oil and gas segment includes operations related to exploration and production of oil and gas, transportation of oil and gas and refining and trading of crude oil, gas and refined products.
- Transportation segment includes operations related to railway and air transportation of cargo and passengers.
- Communication segment includes operation of fixed line communication, including local, long-distance intercity and international telecommunication services (including CIS and non-CIS countries); and also renting out of lines, data transfer services and wireless communication services.
- Energy segment includes operations related to production and distribution of electricity, the function of oversight over the input of electricity into the energy system and consumption of imported electricity, the function of centralized operation and dispatch of facilities in the Unified Energy System of Kazakhstan.
- Mining segment includes exploration, mining, processing, sales of mineral resources and geological exploration.
- Industrial segment includes industry enterprises and projects of chemical industry.
- Corporate center segment covers Fund's investing and financing activities, including provision of loans to related and third parties.
- Other segment includes operations related to assisting the Government in increasing housing availability by investing into residential development and other operations.

The address of the Fund's registered office is 17/10 Syganak str., Nur-Sultan, the Republic of Kazakhstan.

These consolidated financial statements were authorised for issue by the Managing Director for Economy and Finance − Member of the Management Board and Chief accountant of the Fund on April 22, 2022 and preliminary approved by the Audit Committee of the Board of Directors of the Fund. These consolidated financial statements should be further approved by the Board of Directors and the Sole Shareholder.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

1. GENERAL INFORMATION (continued)

Privatization plan

On April 30, 2014 the Government approved the initial Privatization Plan for 2014-2016. On December 30, 2015 the Government approved the new 2016-2020 Complex Privatization Plan (replacing previous 2014-2016 Privatization Plan) and the list of all state owned assets to be privatized, including certain Fund subsidiaries.

On December 29, 2020, by the Resolution of the Government of the Republic of Kazakhstan No. 908 *On Some Issues of Privatization for 2021-2025*, a new comprehensive Privatization Plan for 2021-2025 was approved (hereinafter − the "Privatization Plan"), which includes a new list of state owned organizations and assets of the Fund's group to be privatized and transferred to a competitive environment.

2. BASIS OF PREPARATION

These consolidated financial statements have been prepared on a historical cost basis, except as described in the accounting policies and the notes to these consolidated financial statements.

These consolidated financial statements are presented in Kazakhstan tenge ("tenge") and all monetary amounts are rounded to the nearest million tenge except where otherwise indicated.

Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by International Accounting Standard Board ("IASB").

The preparation of consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in *Note 4*.

In course of preparation of these consolidated financial statements the Group management considered the current international economic environment including complex of uncertainties due to COVID-19 pandemic. The consolidated financial statements were prepared on a going concern basis.

Restatement affecting comparative information

Changes in presentation of the consolidated statement of cash flows

Certain amounts in the consolidated statement of cash flows for the year 2020 have been presented in separate lines in accordance with the presentation adopted in consolidated financial statements for the year 2021. The Group changed the presentation of its consolidated financial statements as the new presentation provides information that is more relevant to users of the consolidated financial statements.

Effect of reclassifications on the consolidated statement of cash flows for 2020:

In millions of tenge	2020 (as previously reported)	Reclassification	2020 (restated)
Cash flows from investing activities			
Proceeds from sale/repayment of debt instruments by issuers	–	108,983	108,983
Other receipts	101,608	(108,983)	(7,375)
Net cash flows used in investing activities	**(594,628)**	**–**	**(594,628)**

2. BASIS OF PREPARATION (continued)

Foreign currency translation

Functional and presentation currency

Items included in these consolidated financial statements of each of the Group's entities are measured using the currency of primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in tenge, which is the Group's presentation currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at the reporting date exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

Group entities

Gains, losses and financial position of all of the Group's subsidiaries, joint ventures and associates (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities for each statement of financial position presented are translated at the closing rate at that reporting date;
- Income and expenses for each statement of comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates; in which case income and expenses are translated at the rate on the dates of the transactions); and
- All resulting exchange differences are recognized as a separate component of other comprehensive income.

Exchange rates

Weighted average currency exchange rates established by the Kazakhstan Stock Exchange ("KASE") are used as official currency exchange rates in the Republic of Kazakhstan.

The following table presents currency exchange rates to tenge:

	December 31, 2021	December 31, 2020	**Weighted average for 2021**	Weighted average for 2020	**April 22, 2022**
United States dollar ("USD")	**431.80**	420.91	**426.06**	413.46	**443.99**
Euro ("EUR")	**489.10**	516.79	**503.96**	472.05	**479.69**
Russian ruble ("RUR")	**5.76**	5.62	**5.78**	5.73	**5.67**

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

New and amended standards and interpretations

The accounting policies adopted in the preparation of the consolidated financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements for the year ended December 31, 2020, except for the adoption of new standards and interpretations effective as of January 1, 2021.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

New and amended standards and interpretations (continued)

The following amendments were applied for the first time in 2021:

- Amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures*, IFRS 4 *Insurance Contracts* and IFRS 16 *Leases*. The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR). The amendments include the following practical expedients:
  - A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest;
  - Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued;
  - Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component.

These amendments had no impact on the consolidated financial statements of the Group:

- Amendments to IFRS 16 *Leases* in regards of COVID-19-related rent concessions. The amendments provide relief to lessees from assessment whether a COVID-19-related rent concession is a lease modification. The amendments did not have a material impact on the consolidated financial statements, as the Group has not received significant rent concessions related to pandemic.

Standards that have been issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

These amendments and interpretations did not have an impact on the consolidated financial statements of the Group:

- IFRS 17 *Insurance Contracts*;
- Amendments to IAS 1 *Presentation of Financial Statements* named *Classification of Liabilities as Current or Non-current*;
- Amendments to IFRS 3 *Business Combinations* named *Reference to the Conceptual Framework*;
- Amendments to IAS 16 *Property, Plant and Equipment: Proceeds before Intended Use*;
- Amendments to IAS 37 *Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts − Costs of Fulfilling a Contract*;
- Amendments to IAS 12 *Income Taxes* named *Deferred Tax Related to Assets and Liabilities arising from a Single Transaction;*
- Amendments to IFRS 1 *First-time Adoption of International Financial Reporting Standards* − Subsidiary as a first-time adopter;
- Amendments to IFRS 9 *Financial Instruments* − Fees in the '10 per cent' test for derecognition of financial liabilities;
- Amendments to IFRS 16 *Leases* named *Lease Incentives*;
- Amendments to IAS 41 *Agriculture* named *Taxation in Fair Value Measurements*;
- Amendments to IAS 1 *Presentation of Financial Statements* and IFRS Practice Statement 2 *Making Materiality Judgements*;
- Amendments to IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Standards that have been issued but not yet effective (continued)

The amendments to IAS 1 and IAS 8 will be effective for annual reporting periods beginning on or after January 1, 2024, with early application permitted.

The Group does not plan for early adoption in respect of above-mentioned new standards and amendments to existing standards to which this option is available.

The Group has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective.

Basis of consolidation

These consolidated financial statements comprise the financial statements of the Fund and its controlled subsidiaries *(Note 34)*.

Subsidiaries

Subsidiaries are the entities controlled by the Group. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee;
- The ability to use its power over the investee to affect its returns.

When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee;
- Rights arising from other contractual arrangements;
- The Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control over the subsidiary.

Assets, liabilities, revenue and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of comprehensive income and consolidated statement of financial position from the date the Group gains control until the date the Group ceases to control the subsidiary.

Except for acquisition in transactions between entities under common control, subsidiaries are consolidated from the date when control is obtained by the Group and are de-consolidated from the date when control ceases. At the acquisition of the subsidiary, acquisition cost is distributed between assets and liabilities based on their fair value as at the date of acquisition. Financial statements of the subsidiaries are prepared for the same reporting period as those of the Fund, using consistent accounting policies.

All intra-group balances and transactions, including unrealized gains resulting from intra-group transactions are eliminated in full. Unrealized losses are eliminated in the same manner as unrealized gains, except that they are eliminated to the extent that there is no evidence of impairment.

Non-controlling interest represents a portion of equity in subsidiaries, which is not owned by the Group, and is recorded separately in equity in the consolidated statement of financial position separately from the equity attributable to the Parent. Losses within a subsidiary are attributed to the non-controlling interest even if that results in its deficit balance.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Basis of consolidation (continued)

Subsidiaries (continued)

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it:

- Derecognises the assets (including goodwill) and liabilities of the subsidiary;
- Derecognises the carrying amount of any non-controlling interest;
- Derecognises the cumulative translation differences recorded in equity;
- Recognises the fair value of the consideration received;
- Recognises the fair value of any investment retained;
- Recognises any surplus or deficit in profit or loss;
- Reclassifies the Parent's share of components previously recognised in OCI to profit or loss or retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities.

Business combinations

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as an aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in general and administrative expenses.

When the Group acquires a business, it assesses the financial assets acquired and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes an analysis of the need of separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, equity interest previously held by the Group in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of IFRS 9 *Financial Instruments: Recognition and Measurement*, is measured at fair value with changes in fair value recognised in the statement of profit or loss in accordance with IFRS 9. If the contingent consideration is not within the scope of IFRS 9, it is measured at fair value through profit and loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in profit or loss.

After initial recognition, the goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date of an entity by the Group, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operations disposed off is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed off in this circumstance is measured on the basis of the relative values of the operation disposed off and the portion of the cash-generating unit retained.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Basis of consolidation (continued)

Business combinations achieved in stages

The acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

In a business combination achieved in stages the acquirer recognises goodwill as of the acquisition date measured as the excess of (a) over (b) below:

(a) The aggregate of:

  (i) The consideration transferred measured in accordance with this IFRS 3 *Business Combinations*, which generally requires acquisition-date fair value;

  (ii) The amount of any non-controlling interest in the acquiree measured in accordance with IFRS 3; and

  (iii) The acquisition-date fair value of the acquirer's previously held equity interest in the acquire;

(b) The net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

Acquisition of subsidiaries from parties under common control

Acquisition of subsidiaries from parties under common control (entities under the Government's control) is accounted for using the pooling of interest method.

Assets and liabilities of the subsidiary transferred under common control are recorded in these consolidated financial statements at the carrying amounts of the transferring entity (the "Predecessor") at the date of the transfer. Related goodwill, if any, inherent in the Predecessor's original acquisition is also recorded in these consolidated financial statements. Any difference between the total book value of net assets, including the Predecessor's goodwill, and the consideration paid is accounted for in these consolidated financial statements as an adjustment to equity.

These consolidated financial statements are presented as if the subsidiary had been acquired by the Group on the date it was originally acquired by the Predecessor.

Change in ownership interests in subsidiaries

In transactions where part of the interest in existing subsidiary is either sold or acquired, but control is retained, the differences between the carrying amounts of net assets attributable to interests in subsidiaries acquired or disposed and the consideration given or received for such increases or decreases are charged or credited to retained earnings.

Joint operations

A joint operation is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities, relating to the arrangement. In relation to its interests in joint operations, the Group recognizes its: Assets, including its share of any assets held jointly; Liabilities, including its share of any liabilities incurred jointly; Revenue from the sale of its share of the output arising from the joint operation; Share of the revenue from the sale of the output by the joint operation; Expenses, including its share of any expenses incurred jointly.

Investment in joint ventures and associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but which does not comprise control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Basis of consolidation (continued)

Investment in joint ventures and associates (continued)

The Group has interests in joint ventures which are jointly controlled entities, whereby the venturers have a contractual arrangement that establishes joint control over the economic activities of the entities. Also, the Group has interests in associates, in which it exercises significant influence over the economic activities of the entities. The Group’s investment in its joint ventures and associates are accounted for using the equity method.

Under the equity method, investment in joint venture / associate is carried in the consolidated statement of financial position at cost plus post acquisition changes in the Group’s share of net assets of the joint venture / associate. Goodwill relating to a joint venture / associate is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment.

The consolidated statement of comprehensive income reflects the share of the results of operations of the joint venture / associate. Where there has been a change in net assets recognized directly in the equity of the joint venture / associate, the Group recognises its share of any changes and discloses this, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and joint venture / associate are eliminated to the extent of the Group’s interest in the joint venture / associate.

The share in profit of joint ventures / associates is shown on the face of the consolidated statement of comprehensive income. This is the profit attributable to equity holders of the joint venture / associate and therefore is profit after tax and non-controlling interest in the subsidiaries of the joint ventures / associates.

Financial statements of the joint venture / associate are prepared for the same reporting period as those of the Parent. Where necessary, adjustments are made to bring their accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an additional impairment loss on the Group’s investment in its joint ventures / associates. The Group determines at each reporting date whether there is any objective evidence that the investment in the joint venture / associate is impaired. If this is the case the Group calculates the amount of impairment as the difference between the recoverable amount of investment in the joint venture / associate and its carrying amount and recognises impairment loss in the consolidated statement of comprehensive income.

Upon loss of joint control over the joint venture and significant influence over associate, the Group measures and recognises any retaining investment at its fair value. Any difference between the carrying amount of the investment in the joint venture / associate upon loss of joint control / significant influence and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

Current versus non-current classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset is classified as current when it is:

- Expected to be realized or intended to be sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within 12 (twelve) months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 (twelve) months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within 12 (twelve) months after the reporting period; or
- There is no unconditional right to defer the settlement of the liability for at least 12 (twelve) months after the reporting period.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Current versus non-current classification (continued)

The Group classifies all other liabilities as non-current. Deferred tax assets and liabilities are always classified as non-current assets and liabilities.

Assets classified as held for sale and discontinued operations

Assets and disposal groups classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell. Assets and disposal groups are classified as held for sale if their carrying amounts will be recovered through a sale transaction rather than through the continuing use. This condition is regarded as met only when the sale is highly probable and the asset or disposal group is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within 1 (one) year from the date of classification.

In the consolidated statement of comprehensive income for the reporting period, and for the prior year comparable period, incomes and expenses from discontinued operations are reported separately from normal income and expenses, even when the Group retains a non-controlling interest in the subsidiary after sale. The resulting profit or loss (net of tax) is reported separately in the consolidated statement of comprehensive income.

Property, plant and equipment and intangible assets once classified as held for sale are not depreciated.

Oil and natural gas exploration, evaluation and development expenditure

Costs incurred before obtaining subsoil use rights (licenses)

Costs incurred before obtaining full subsoil use rights (licenses) are expensed in the period in which they are incurred, except when costs are incurred after signing preliminary agreements with the Government of the Republic of Kazakhstan, in such cases costs incurred after this date are capitalized.

Expenditures for acquisition of subsurface use rights

Expenditures for acquisition of subsurface use rights (exploration and production) comprise signature bonuses, historical costs, obligatory expenditures for ecological and social programs and are capitalized within intangible assets as subsurface use rights at exploration and evaluation phase.

Expenditures for acquisition of subsurface use rights are accounted for on a field-by-field basis. Each field is tested for impairment on an annual basis. If no future activity is planned, the remaining balance of the acquisition costs is written off. Starting from the commercial production on fields subsurface use rights (remaining costs) shall be transferred to the property, plant and equipment and shall be amortized using unit-of-production method on actual production based on total proved reserves.

Exploration and evaluation expenditures (construction in progress)

Exploration and evaluation expenditures include geological and geophysical costs; costs directly related to exploration drilling; stripping activities; overhead and other expenses on exploration and evaluation, which could be related to a certain field. These costs include employee remuneration, materials and fuel used, rig costs and payments made to contractors. Except for geological and geophysical costs, exploration and evaluation expenditures are capitalized within exploration and evaluation assets, accounted for by subsurface use contracts and are not amortized. If mineral or hydrocarbon resources are not found, this could be an indication of impairment. All capitalized costs are subject to technical, commercial and management review at least once a year to confirm the continued intent to develop or otherwise extract value from the discovery. When this is no longer the case, the costs are written off. If mineral or hydrocarbon resources are determined and development is sanctioned, relevant costs are then transferred to oil and gas or mining assets subclasses.

Development and production expenditures (oil and gas and mining assets)

Development and production expenditures comprise previously capitalized (and reclassified in commencement of production) expenditures for acquisition of subsurface use rights and exploration and evaluation costs; drilling of producing wells regardless of the drilling results; construction of landfills; development of surface technological facilities required for production, collection and preparation of hydrocarbons and mineral resources at fields; other costs incurred in the process of organization of commercial production at fields; capitalized discounted costs for wells and mines abandonment and site restoration.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Oil and natural gas exploration, evaluation and development expenditure (continued)

Development and production expenditures (oil and gas and mining assets) (continued)

Development and production expenditures are capitalized within property, plant and equipment (oil and gas and mining assets), and are accounted for on a field-by-field basis.

Oil and gas and mining assets are depreciated using a unit-of-production method based on actual production from commencement of commercial production at fields. Certain oil and gas and mining assets (surface facilities and equipment) with useful lives significantly differing from those of the fields are depreciated on a straight-line basis over their useful lives. The cost of acquisition of subsurface use rights including discounted decommissioning costs are depreciated over total proved reserves. The other field development costs are amortized over proved developed reserves.

Property, plant and equipment (other than oil and gas and mining assets)

On initial recognition, property, plant and equipment is measured at cost. Subsequently, property, plant and equipment are stated at cost less accumulated depreciation, depletion and impairment. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads.

Property, plant and equipment, other than oil and gas and mining assets, principally comprise the following classes of assets, which are depreciated on a straight-line basis over the expected useful lives:

UPS Power transmission lines	50 years
Refinery assets	4-100 years
Pipelines	2-30 years
Buildings and premises	2-100 years
Railway tracks and infrastructure	10-80 years
Machinery, equipment and vehicles	2-50 years
Other	2-20 years

In cases when items of property, plant and equipment are subject to major inspection, the cost is recognized in the carrying amount of property, plant and equipment as a replacement of component if the recognition criteria set out in IAS 16 are satisfied.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of an asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the reporting period the asset is derecognised.

Residual values, useful lives and methods of depreciation are reviewed, and adjusted if appropriate, at each financial year end.

Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment loss. Internally generated intangible assets, excluding capitalised development costs, are not capitalised and expenditure is charged against profits in the year in which the expenditure is incurred.

The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year-end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the intangible asset is accounted for by changing the amortisation period or method, as appropriate, and treated as changes in accounting estimates.

The amortisation expense on intangible assets with finite lives is recognized in the consolidated statement of comprehensive income in the expense category consistent with the function of the intangible asset.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Intangible assets (continued)

Intangible assets with the finite useful life principally comprise the following classes of assets which are amortised on a straight-line basis over the expected useful lives:

Licenses	3-20 years
Software	1-14 years
Other	2-15 years

Indefinite lives intangible assets are not amortized, but tested for impairment annually or whenever there are indications of impairment and, if necessary, written down to the recoverable amount.

Investment properties

Investment property is initially measured at cost, including transaction costs.

Since the Group adopted cost model, after initial recognition, investment property is accounted for in accordance with the cost model as set out in IAS 16 *Property, Plant and Equipment*, that is, at cost less accumulated depreciation and less accumulated impairment losses.

The depreciation is calculated based on straight line method basis over the expected remaining useful average life of 2-100 years.

Investment property is derecognised (eliminated from the consolidated statement of financial position) on its disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected in the future. The difference between the net inflows arisen from the disposal and carrying amount of the asset is recognised in the consolidated statement of comprehensive income for the period in which it was derecognized.

Impairment of non-financial assets

The Group assesses non-financial assets or groups of assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Individual assets are grouped for impairment assessment purposes at the lowest level at which there are identifiable cash inflows that are largely independent of the cash inflows of other groups of assets. If any such indication of impairment exists or when annual impairment testing for an asset group is required, the Group makes an estimate of its recoverable amount.

An asset’s or cash generating unit’s (CGU’s) recoverable amount is higher of its fair value less costs to sell and its value in use. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset or CGU is considered impaired and an allowance is made to reduce the asset to its recoverable amount. In assessing value in use, the estimated future cash flows are adjusted for the risks specific to the asset or CGU and are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money. An assessment is made at each reporting date as to whether there is any indication that previously recognized impairment provision may no longer exist or may have decreased. If such indication exists, the recoverable amount is estimated.

A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset’s recoverable amount since the last impairment allowance was recognized. If that is the case, the carrying amount of the asset is increased to its recoverable amount.

That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation/ amortisation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in profits and losses.

After such a reversal, the depreciation/amortisation charge is adjusted in future periods to allocate the asset’s revised carrying amount, less any residual value, on a systematic basis over its remaining useful life.

The following process is applied in assessing impairment of goodwill:

- Goodwill is tested for impairment annually as at December 31, and when circumstances indicate that its carrying amount may be impaired;
- Impairment is determined for goodwill by assessing the recoverable amount of the cash-generating units, to which the goodwill relates. Where the recoverable amount of the cash-generating units is less than their carrying amount an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Impairment of exploration and evaluation assets

Exploration and evaluation assets are tested for impairment when reclassified to oil and gas development tangible or intangible assets or whenever facts and circumstances indicate impairment. One or more of the following facts and circumstances indicate that the Group should test exploration and evaluation assets for impairment (the list is not exhaustive):

- The period for which the Group entity has the right to explore and appraise in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- Substantive expenditure on the further exploration for and evaluation of hydrocarbon resources in the specific area is neither budgeted nor planned;
- Exploration for and evaluation of hydrocarbon resources in the specific area have not led to the discovery of commercial viable quantities of hydrocarbon resources and the Group entity has decided to discontinue such activities in the specific area;
- Sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

Financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (FVOCI), and fair value through profit or loss (FVPL).

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15.

In order for a financial asset to be classified and measured at amortised cost or FVOCI, it needs to give rise to cash flows that are "solely payments of principal and interest (SPPI)" on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in three categories:

- Financial assets at amortised cost (debt instruments);
- Financial assets at fair value through other comprehensive income;
- Financial assets at fair value through profit or loss.

Financial assets at amortised cost (debt instruments)

The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Financial assets (continued)

Subsequent measurement (continued)

Financial assets at amortised cost (debt instruments) (continued)

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Group’s financial assets at amortised cost include trade and other receivables, loans due from third and related parties, debt securities of third and related parties and bank deposits.

Financial assets at fair value through other comprehensive income

The Group measures financial assets at FVOCI if both of the following conditions are met:

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Interest consists of consideration for the time value of money, and for the credit risk associated with the principal amount outstanding during a particular period of time.

The Group’s financial assets at FVOCI include mainly debt securities of third and related parties.

Financial assets at fair value through profit or loss

Financial assets at FVPL include certain loans due from related parties, which contain embedded derivative financial instruments, and coupon bonds included in other financial assets mandatorily required to be measured at fair value. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at FVPL, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at FVOCI, as described above, debt instruments may be designated at FVPL on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at FVPL are carried in the consolidated statement of financial position at fair value with net changes in fair value recognised in the consolidated statement of comprehensive income.

The Group’s financial assets at FVPL include mainly loans issued, debt and equity securities of third and related parties.

Derecognition

A financial asset is primarily derecognised (removed from the consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired; or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a “pass-through” arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset; or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of its continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Financial assets (continued)

Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss.

ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade and other receivables the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Hedge accounting

The Group designates certain hedging instruments in respect of foreign currency risk, as either hedges of net investments in foreign operations or cash flow hedges.

At the inception of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values of foreign operations or cash flows of the hedged item attributable to the hedged risk.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss, in the same line as the recognized hedged item.

Hedge accounting is discontinued:

a) When the Group revokes the hedging relationship;

b) When the hedging instrument expires or is sold, terminated, or exercised; or

c) When it no longer qualifies for hedge accounting.

Any gain or loss recognized in other comprehensive income and accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

Investments in foreign operations hedge

Foreign currency gain or loss arising on items that are designated as part of the hedge of the Group’s net investment in foreign operations are recognized in consolidated statement of comprehensive income within currency translation reserve.

Cash flow hedges

Foreign currency gain or loss arising from financial instruments that are designated and qualify as cash flow hedges is recognized in consolidated statement of comprehensive income within hedge reserve.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Inventories

Inventories are valued at cost or net realisable value, whichever is lower. Costs comprise charges incurred in bringing inventory to its present location and condition. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and estimated costs necessary to sell.

The same cost formula is used for all inventories having a similar nature and use. Inventories of oil and gas and energy operating segments are valued on a first-in first-out ("FIFO") basis. All other inventories are valued on the weighted-average cost basis.

Cash and cash equivalents

Cash and cash equivalents are defined as cash on hand, demand deposits, short-term and highly liquid investments with original maturity of not more than 3 (three) months readily convertible to known amounts of cash and subject to insignificant risk of change in value.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at FVPL, loans borrowings and payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, plus directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings and derivative financial instruments.

Subsequent measurement

The measurement of financial liabilities depends on their classification as follows:

Financial liabilities at fair value through profit or loss

Financial liabilities at FVPL includes financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in profit or loss.

The Group has not designated any financial liabilities upon initial recognition as at FVPL.

Trade and other payables

Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest rate (EIR).

Loans and borrowings

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the EIR. Gains and losses are recognized in the consolidated statement of comprehensive income when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the EIR. The EIR amortization is included in finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 (twelve) months after the reporting date. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset. Other borrowing costs are recognized as an expense when incurred.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Financial liabilities (continued)

Subsequent measurement (continued)

Financial guarantee contracts

Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as a liability at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the financial guarantee contracts after initial recognition at the higher of the amount initially recognized less, when appropriate, the cumulative amount of income/amortization in accordance with the principles of IFRS 15 *Revenue from Contracts with Customers* and the amount of the estimated allowance for expected credit losses.

Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

Fair value of financial instruments

The fair value of financial instruments that are traded in active markets at each reporting date is determined by reference to quoted market prices or dealer price quotations (bid price for long positions and ask price for short positions), without any deduction for transaction costs.

For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include:

- Using recent arm's length market transactions;
- Reference to the current fair value of another instrument that is substantially the same;
- A discounted cash flow analysis or other valuation models.

An analysis of fair values of financial instruments and further details as to how they are measured are provided in *Note 38*.

Leases

Determining whether the agreement is a lease or whether it contains evidence of a lease is based on an analysis of the content of the agreement at the date of the commencement of the lease. The agreement is a lease or contains signs of a lease if the implementation of the agreement depends on the use of a particular asset (or assets), and the right to use the asset or assets as a result of this agreement is transferred from one party to the other, even if this asset (or these assets) is not indicated (not specified) in the agreement explicitly.

The Group as lessee

For the lease contracts (or separate components of the contracts), under which the Group is granted the right to control the use of an identified asset (as defined by IFRS 16 *Leases*) for a certain period of time in exchange for consideration, the Group recognizes a right-of-use asset and a corresponding lease liability at the inception of the contract. Non-lease components of the contracts are accounted for in accordance with other relevant standards.

In accordance with IFRS 16 *Leases*, the Group applies practical expedient for not recognising the lease for the lease contracts with lease term of less than 12 months at lease inception and without purchase option, for the leases with variable lease rates that do not depend on an index or rate and for the leases of low value assets.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Leases (continued)

The Group as lessee (continued)

The Group recognizes short-term leases and leases of low value assets as expense on a straight-line basis over the term of the lease.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date. Lease payments are discounted by using the Group incremental borrowing rate, except when the rate is implicit in the lease and can be readily determined.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.
- The lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case a revised discount rate is used).
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

At the commencement date, the Group measures the right-of-use asset at cost that includes the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date less any lease incentives received, any initial direct costs incurred by the lessee. The right-of-use asset is subsequently measured according to the accounting policy that is applied for own assets, including for depreciation and amortization and impairment measurement.

The recognised right-of-use asset is depreciated over the shorter period of expected useful life of the underlying asset or lease term.

The Group presents lease liabilities in the consolidated statement of financial position as a separate line *(Note 21)*, while right-of-use assets are presented within the same line item as that within which the corresponding underlying assets would be presented if they were owned, i.e. within property, plant and equipment *(Note 6)*.

In accordance with the requirements of IFRS 16, the Group classifies repayment of principal in cash flows from financial activities. In accordance with the Group's accounting policy, interest paid is classified as part of the cash flows from operating activities. Payments on short-term leases, leases of low value assets and variable rental payments not included in the valuation of the lease liability are presented as part of operating activities.

The Group as lessor

The Group enters into lease agreements as a lessor with respect to some of its property, plant and equipment items.

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases. Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease.

Provisions

Asset retirement obligation (decommissioning)

Provision for decommissioning is recognized in full, on a discounted cash flow basis, when the Group has an obligation to dismantle and remove a facility or an item of property, plant and equipment and to restore the site on which it is located, and when a reasonable estimate of that provision can be made.

The amount recognized is the present value of the estimated future expenditure determined in accordance with local conditions and requirements. A corresponding addition to the carrying amount of the related item of property, plant and equipment in the amount equivalent to the provision is also recognized. This amount is subsequently depreciated as part of the capital costs of the production and transportation facilities in accordance with respective depreciation method.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Provisions (continued)

Asset retirement obligation (decommissioning) (continued)

Changes in the measurement of an existing decommissioning provision that result from changes in the estimated timing or amount of the outflow of resources embodying economic benefits required to settle the obligation, or change in the discount rate, is accounted for so that:

a) Changes in the provision are added to, or deducted from, the carrying amount of the related asset in the current period;

b) The amount deducted from the cost of the asset shall not exceed its carrying amount. If a decrease in the provision exceeds the carrying amount of the asset, the excess is recognized immediately in the consolidated statement of comprehensive income; and

c) If the adjustment results in an addition to the cost of an asset, the Group considers whether this is an indication that the new carrying amount of the asset may not be fully recoverable. If it is such an indication, the Group tests the asset for impairment by estimating its recoverable amount, and accounts for any impairment loss, in accordance with IAS 36.

Other provisions

Provisions are recognized in the consolidated financial statements when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Employee benefits

Contributions to pension funds

The Group withholds 10% from the salary of its employees limited to certain annual amounts as the employees' contribution to their designated pension funds. Under the legislation, employees are responsible for their retirement benefits payable by that pension funds and the Group has no present or future obligation to further compensate its employees upon their retirement in relation to these arrangements.

Social tax

The Group pays social tax on salaries payable to employees according to the current statutory requirements of the Republic of Kazakhstan. Social tax is expensed as incurred.

Defined benefit plan

In accordance with the Collective Agreements signed with trade unions and other benefit regulations, some subsidiaries of the Group provide certain benefits to its employees upon their retirement ("Defined Benefit Plan").

The Group recognises actuarial gains and losses arising from the reassessment of the employee benefit liability in the period they are identified in OCI and profits and losses, and recognises benefit costs and obligations based on estimates determined in accordance with IAS 19 *Employee Benefits*.

The obligation and cost of benefits under the defined benefit plan are determined using the projected unit credit method. This method considers each year of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation.

The cost of providing benefits is charged to profit and loss, so as to attribute the total benefit cost over the service lives of employees in accordance with the benefit formula of the defined benefit plan. This obligation is measured at the present value of estimated future cash flows using a discount rate that is similar to the interest on government bonds where the currency and terms of these bonds are consistent with the currency and estimated terms of the defined benefit plan obligation. The defined benefit plans of Group's subsidiaries are unfunded.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Equity

Share capital

Common shares are classified as equity. External costs directly attributable to the issue of new shares, other than on a business combination, are shown as a deduction from the proceeds in equity. Any excess or deficiency of the fair value of consideration received over the par value of shares issued is recognized as an increase or decrease in the retained earnings.

Non-controlling interests

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from the equity attributable to the equity holders of the Parent. Losses of subsidiaries are attributed to the non-controlling interest even if this results in a deficit balance.

Dividends

Dividends are recognized as a liability and deducted from equity at the reporting date only if they are declared before or on the reporting date. Dividends are disclosed in the consolidated financial statements when they are proposed before the reporting date or proposed or declared after the reporting date but before the consolidated financial statements are authorised for issue.

Other distributions to the Shareholder

Other distributions to the Shareholder recognized as deductions from retained earnings are represented by expenses incurred or asset distribution made at the discretion of the Shareholder, including property, plant and equipment, interest in another entities, other disposal groups, cash and other assets in accordance with accounting policy of the Group.

Revenue recognition

Revenue is recognized when it is probable that the economic benefits will flow to the Group and the amount of revenue can be reliably measured.

Sale of goods

Revenues are recognized when (or as) the Group satisfies a performance obligation by transferring a promised good or service (i.e. an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset, which usually occurs when the title is passed, provided that the contract price is fixed or determinable and collectability of the receivable is reasonably assured. For export sales, title generally passes at the border of the Republic of Kazakhstan. Revenue is measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts, volume rebates and reimbursable taxes.

Sales of support services are recognized as services are performed provided that the service price can be determined and no significant uncertainties regarding the receipt of revenues exist.

Rendering of services

Revenue from rendering of services is recognized when the services have been performed.

In respect of services related to transportation, revenue is recognized with reference to the stage of completion of the transportation at the reporting date provided that the stage of completion of transportation and the amount of revenue can be measured reliably. Prepayments received from customers relating to transportation services that have not been started yet are recognized upon receipt as “advances received from customers”. Deferred income is credited to current revenue, as the service is provided.

The Group’s revenue in the energy, communications and transportation segments is primarily recognized over a period of time, while the rest of the Group’s revenue is primarily recognized at a point in time.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue recognition (continued)

Sale and lease back transactions

The Group accounts for a transfer of an asset in a sale and leaseback transaction as a sale only if the transfer meets the requirements of IFRS 15 *Revenue from Contracts with Customers*.

If, under IFRS 15, a sale is to be recognised by the seller-lessee, then the right-of-use asset leased back is measured at the proportion of the previous carrying amount of the asset that relates to the right of use retained by the seller-lessee. The seller-lessee recognises only the amount of any gain or loss that relates to the rights transferred to the buyer-lessor.

If the transfer of an asset by the seller-lessee does not satisfy the requirements of IFRS 15 to be accounted for as a sale of the asset, the seller-lessee continues to recognize the transferred asset and recognizes a financial liability equal to proceeds for the transfer by applying IFRS 9 *Financial Instruments*.

Interest income

For all financial instruments measured at amortised cost and interest-bearing financial assets classified as investments held at FVOCI, interest income is recorded using the effective interest rate (EIR). EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability.

Trade receivables

Accounts receivable represent the Group's right to the consideration amount, which is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

Contract liabilities from contracts with customers

A contract liability is recognised if a payment is received or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

Costs to obtain a contract

The Group pays commission to sales agents for new connected subscribers in the communication segment. The commission to sales agents is capitalized within other non-current assets in the consolidated statements of financial position. Costs to obtain a contract are amortized over the period the service is provided to the customer.

Establishment of tariffs

A number of subsidiaries of the Group are subject to regulation by the Committee for regulation of natural monopolies of the Republic of Kazakhstan ("CRNM"). This Committee is responsible for approval of the methodology for tariff calculation and tariff rates, under which the subsidiaries derive a significant portion of their revenues.

Government grants

Due to the fact that the Government of the Republic of Kazakhstan is the sole shareholder of the Fund, the Group analyses all transactions with the Government to assess its role: where the Government acts primarily in its capacity of the Shareholder or where it acts as a regulator.

If it is determined that in a specific transaction the Government acts in capacity of the Shareholder any gains or losses incurred by the Group as a result of such transaction are reflected directly in equity as either a contribution or withdrawal of equity by the Shareholder.

If it is determined that in a specific transaction the Government does not act in capacity of the Shareholder such transactions are accounted for using provisions of IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance*. In such circumstances, government grants are recognized at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognized as income over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate. Where the grant relates to an asset, the fair value is credited to a deferred income account and is released to the consolidated statement of comprehensive income over the expected useful life of the relevant asset by equal annual instalments. Grants related to income are presented separately in the consolidated statement of comprehensive income within revenues from operating activities.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Expense recognition

Expenses are recognized as incurred and are reported in the consolidated statement of comprehensive income in the period to which they relate on the accrual basis.

Income tax

Income tax for the year comprises current and deferred tax. Income tax is recognized in the profits and losses, except to the extent that it relates to items charged or credited to other comprehensive income or equity, in which case it is recognized in other comprehensive income. Current tax expense is the expected tax payable on the taxable income for the year and any adjustment to tax payable in respect of previous years.

Excess profit tax (“EPT”) is treated as an income tax and forms part of income tax expense. In accordance with the subsurface use contracts, the Group accrues and pays EPT, at specified rates of after tax profit which has been adjusted for specific deductions in accordance with the applicable subsurface use contracts, when certain internal rates of return are exceeded.

Deferred tax is calculated with respect to both corporate income tax (“CIT”) and EPT. Deferred EPT is calculated on temporary differences for assets allocated to subsurface use contracts at the expected rate of EPT to be paid under the contract.

Deferred tax is provided using the statement of financial position method, in relation to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The temporary differences arising due to the following are not provided for:

- The initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither accounting profit nor taxable profit or loss; and
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled based on the tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Value added tax (“VAT”)

Tax authorities permit the settlement of sales and purchases VAT on a net basis. VAT receivable represents VAT on domestic purchases net of VAT on domestic sales. Export sales are zero rated.

Related parties

Related parties include the Group’s Shareholder, key management personnel, associates, joint ventures and entities in which a substantial interest in the voting power is owned, directly or indirectly, by the Group’s shareholders or key management personnel.

Contingent liabilities and contingent assets

Contingent liabilities are not recognised in the consolidated financial statements. They are disclosed in the notes to the consolidated financial statements *(Note 37)* unless the possibility of an outflow of resources embodying economic benefits is remote.

Contingent assets are not recognized in the consolidated financial statements. Where an inflow of economic benefits is probable, they are disclosed in the notes.

Subsequent events

Post-year-end events that provide evidence of conditions that existed at the reporting date (adjusting events) are reflected in the consolidated financial statements. Post-year-end events that are not adjusting events are disclosed in the notes when material.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of the consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and contingent assets and liabilities at the reporting date and reported amounts of assets, liabilities, revenues, expenses and contingent assets and liabilities during the reporting period. Actual outcomes could differ from these estimates.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

Considerations in respect of COVID-19 pandemic and hydrocarbon economy in 2021

The impact of COVID-19 and unfavorable trend in the global hydrocarbons market on the basis of preparation of this consolidated financial statements has been considered as part of the going concern assessment. To support this assertion liquidity forecast has been assessed under several stressed scenarios. And as a result, impairment tests were performed.

Recoverability of oil and gas assets, downstream, refining and other assets

The Group assesses assets or CGU for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Where an indicator of impairment exists, a formal estimate of the recoverable amount is made, which is considered to be the higher of the fair value less costs to sell and value in use. These assessments require the use of estimates and assumptions such as long-term oil prices, discount rates, future capital requirements, operating performance (including production and sales volumes) that are subject to risk and uncertainty. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset/CGU is considered to be impaired and is written down to its recoverable amount. In assessing recoverable values, the estimated future cash flows are adjusted for the risks specific to the asset group and are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Fair value less costs to sell is identified as the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the entity and not applicable to entities in general.

Under IAS 36, one of the possible impairment indicators is the presence of significant changes that had negative consequences for the Group that occurred during the year or are expected in the near future in the technological, market, economic or legal environment in which the Group operates or in the market for which the asset is used.

Impairment testing assumptions

The Group's long-term assumptions for Brent oil prices, KZT/USD exchange rate and inflation projections have been revised and are based on externally sourced forecasts and rates of the independent research organizations considering long-tern market expectations. Production volumes estimates are based on proved developed and undeveloped reserves for subsidiaries, and on proved and probable reserves for significant investments in joint ventures and associates.

Production period is either based on subsoil use contracts' expiration date or on extended license period, to which the Group has strong intention to extend its licenses. Estimated production volumes are based on the Group's production plans that are mostly used for the purposes of application filing for extension of subsoil use contracts.

Discount rates were estimated on the weighted average cost of capital of the individual cash generating unit and ranged between 10.70%-16.30% depending on the functional currency, production period, size, equity risk premium, beta and gearing ratio of the relevant CGU.

The long-term price assumptions applied were derived from Bloomberg consensus, so did the near-term commodity price assumptions, a summary of which, in real 2021 terms, is provided below:

	2022	2023	2024	2025	2026
Brent oil ($/bbl)	73	71.5	73	70	71

In "Oil and gas" segment impairment charges of 12,751 million tenge were recognized. Impairment charges mainly relate to partial impairment of refining assets of KMG International N.V. (further KMGI) of 8,298 million tenge *(Note 29)* and barges of KazMorTransFlot LLP of 4,453 million tenge *(Note 29)*. The recoverable amounts of the barges were based on value-in-use calculations and recoverable amount of KMGI assets for impairment testing purposes was determined based on fair value less cost to disposal.

Headroom of the majority of oil and refining assets are sensitive to changes in price or other assumptions. The changes within next financial periods may result in recoverable amount of these assets above or below the current carrying amounts and therefore there is a risk of impairment reversals or charges in those periods.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Oil and gas reserves

Oil and gas reserves are a material factor in the Group's computation of depreciation, depletion and amortization expenses. The Group estimates its oil and gas reserves in accordance with the methodology of the Society of Petroleum Engineers (SPE). In estimating its reserves under SPE methodology, the Group uses long-term planning prices. Using planning prices for estimating proved reserves removes the impact of the volatility inherent in using year-end spot prices. Management believes that long-term planning price assumptions, which are also used by management for their business planning and investment decisions are more consistent with the long-term nature of the upstream business and provide the most appropriate basis for estimating oil and gas reserves.

All reserve estimates involve some degree of uncertainty. The uncertainty depends mainly on the amount of reliable geological and engineering data available at the time of the estimate and the interpretation of this data.

The relative degree of uncertainty can be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Proved reserves are more certain to be recovered than unproved reserves and may be further sub-classified as developed and undeveloped to denote progressively increasing uncertainty in their recoverability.

Estimates are reviewed and revised annually. Revisions occur due to the evaluation or re-evaluation of already available geological, reservoir or production data, availability of new data, or changes to underlying price assumptions. Reserve estimates may also be revised due to improved recovery projects, changes in production capacity or changes in development strategy. Proved developed reserves are used to calculate the unit of production rates for depreciation, depletion and amortization in relation to oil and gas production assets. The Group has included in proved reserves only those quantities that are expected to be produced during the initial subsoil use contract period. This is due to the uncertainties surrounding the outcome of such renewal procedures, since the renewal is ultimately at the discretion of the Government. An increase in the Group's subsoil use contract periods and corresponding increase in reported reserves would generally lead to lower depreciation, depletion and amortization expense and could materially affect earnings. A reduction in proved developed reserves will increase depreciation, depletion and amortization expense (assuming constant production), reduce income and could also result in an immediate write-down of the property's book value. Given the relatively small number of producing fields, it is possible that any changes in reserve estimates year on year could significantly affect prospective charges for depreciation, depletion and amortization.

Please refer *Note 29* for details on annual impairment test results.

Mining reserves

Mining reserves are a critical component of the projected cash flow estimates that are used to assess the recoverable values of assets and to determine depreciation and amortisation expense in mining segment.

Group entities usually estimate reserves based on results of detailed mine exploration, which is evaluated and approved by State Reserves Commission (SRC) of Kazakhstan Geology Committee. Normally upon stripping during production actual reserves of each area are greater or lesser than geological reserves approved by SRC.

Uranium reserves (estimate)

Uranium reserves are a critical component of the Group's projected cash flow estimates that are used to assess the recoverable values of relevant assets as well as depreciation and amortisation expense. Estimates of uranium reserves also determine the life of mines, which in turn affect asset retirement obligation calculations.

In 2021 and 2020, the Group engaged an independent consultant to assess the Group's ore reserves and mineral resources in accordance with the Australasian Code for reporting on geological exploration works, mineral resources and ore reserves (hereinafter JORC Code). Independent assessments of reserves and resources was carried out as of December 31, 2021 and December 31, 2020. The consultant reviewed all key information upon which the reported mineral resource and ore reserve statements for the mining assets of the Group are based.

The consultant's reports contain an assessment of the tons of uranium contained in ore which has the potential to be extracted by the existing and planned mining operations (the mineral resource), and also the tons of uranium contained in ore currently planned to be extracted as envisaged by the respective life-of-mine plans (the ore reserve). The Group used the ore reserves data for calculation of impairment of long-term assets, unit of production depreciation for each of the Group's mines as well as asset retirement obligation calculations.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Goodwill

KMGI CGU, including goodwill

As at December 31, 2021 and 2020, the Group performed its annual impairment tests for goodwill and downstream, refining and other assets due to existence of impairment indicators at the CGUs of KMGI. As the result of the impairment analysis, recoverable amount of KMGI CGUs exceeded their carrying values.

Pavlodar refinery, goodwill

As of December 31, 2021 and 2020 the Group has goodwill of 88,553 million tenge related to acquisition of Pavlodar oil chemistry refinery LLP (further Pavlodar refinery). The Group performed annual impairment test for the Pavlodar refinery goodwill using the current tolling business scheme employed by Pavlodar refinery in December 2021 and 2020. The Group considered the forecast for oil tolling volumes, oil tolling tariffs, capital expenditures, among other factors, when reviewing for indicators of impairment. The recoverable amount is calculated using a discounted cash flow model. In 2021, the discount rate of 12.06% was calculated based on the pre-tax weighted average cost of capital. Forecasted cash flows till to 2029 were based on five-years business plan of Pavlodar refinery 2022-2026, which assumes current management estimates on potential changes in operating and capital costs. As at December 31, 2021 and 2020 the recoverable amount of goodwill, which was determined based on value-in-use, exceeded its book value, as such no impairment of Pavlodar refinery goodwill was recognized.

Sensitivity to changes in assumptions

Results of the assessment of recoverable amount of Pavlodar refinery goodwill are sensitive to changes in key assumptions, in particular, assumptions related to changes in discount rate and target EBITDA in terminal period. Increase in discount rates by 1.0% to 13.06% and decrease of target EBITDA in terminal period by 1% would not result decrease of the recoverable amount of CGU Pavlodar refinery to its carrying value.

Other CGUs

Revision to the Group’s commodity price and other assumptions have not resulted in impairment charges in any other CGUs of the *Oil and gas segment*.

National Company “Kazakhstan Temir Zholy” JSC (“NC KTZh”)

The management assesses the recoverability of goodwill annually as of December 31 or every time when impairment indicators of the single CGU appear.

For the analysis of goodwill impairment, the management has used the detailed calculation of value in use of the single cash-generating unit performed in the prior period as of December 31, 2020, considering the below criteria is met:

- The assets and liabilities making up the Group CGU;
- Prior year detailed calculation of value in use resulted in substantial margin and the management ensured that there are no circumstances that result in decrease of the headroom as of December 31, 2021;
- Based on the analysis of events occurred since the most recent calculation of value in use and circumstances changed, the likelihood that a current recoverable amount determination would be less than the current carrying amount of the unit is remote.

To analyze the above factors, the management ensured that the key operating indicators for 2021 exceed budget and analyzed the impact of the most sensitive assumptions, such as:

- Transit freight transportation volume − the market demonstrates a favorable environment for the growth of transit; and
- Discount rate (WACC) − there have been no significant changes in the inputs used to calculate discount rate.

Management concluded that the recoverable amount of the goodwill exceeds its carrying amount as of December 31, 2021.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Goodwill (continued)

National Company "Kazakhstan Temir Zholy" JSC ("NC KTZh") (continued)

The Group performed a sensitivity analysis and concluded that when using the following justifiably possible changes in the key assumptions on an individual basis, while keeping other parameters constant, the fair value of property, plant and equipment, intangible assets and goodwill will be equal to its carrying value:

- Transit freight transportation volumes − a decrease of the volumes by 9.84% compared to calculation;
- Discount rate (WACC) − an increase of the discount rate from 11.46% to 12.65%.

With more significant changes in external or internal impairment indicators or simultaneous adverse impact of several factors, the analysis of external or internal indicators may result in the need to recognise impairment in the future.

DP Ortalyk LLP, JV Akbastau JSC and Karatau LLP

Goodwill relates to business combinations in prior periods being: 5,166 million tenge relates to subsurface use operations of DP Ortalyk LLP at the area Central on Mynkuduk mine, 24,808 million tenge relates to Karatau LLP and 18,520 million tenge relates to JV Akbastau JSC, which independently perform subsurface use operations at the Budenovskoye mine. At least annually, goodwill is tested for impairment. The carrying value of goodwill applicable to each of these entities is allocated to their respective cash generating units and the recoverable amount was determined on a value in use basis from forecast cash flows over the term of subsurface use contracts. Forecast cash flows are based on the approved volume of proven reserves, estimated volumes of production and sales over a life of mine plan approved by management, using a discount rate of 12.97% for 2021 year (2020: 12.35%). Production volumes are consistent with those agreed with the competent authority and independent consultant's report and are based on the production capacity of the cash-generating units.

Key assumptions used in calculations include forecast sales prices, production costs and capital expenditures. Sales prices used in developing forecast cash flows were determined using an independent official source Ux Consulting LLC published in the fourth quarter of 2021. Production costs and capital expenditures are based on approved budgets for 2022-2026 and growth of 5.12% which approximates long-term average inflation rates. The estimated values in use significantly exceed the carrying amounts of the non-current assets of the three cash-generating units, including goodwill, and therefore even reasonably possible changes in key assumptions would not lead to impairment losses being recognised.

Khan Tengri Holding B.V., Kcell JSC and IP TV

For impairment testing, goodwill related to *Communication* segment acquired through business combinations was allocated to three cash-generating units ("CGUs") ("IP TV", "Kcell JSC" and "Khan Tengri Holding B.V.").

The carrying amount of goodwill allocated to each of CGUs was as follows:

In millions of tenge	**2021**	2020
Khan Tengri Holding B.V.	**96,206**	96,206
Kcell JSC	**53,490**	53,490
IP TV	**2,706**	2,706
	152,402	152,402

The Group performed its annual impairment test in December 2021 and 2020:

- The recoverable amount of the Khan Tengri Holding B.V. and Kcell JSC CGUs has been determined based on the calculation of fair value less costs of disposal as it was deemed to produce a more reliable result. This valuation technique was based on unobservable inputs (discounted cash flows) that represent Level 3 of the fair value hierarchy.
- The pre-tax discount rate applied to projected cash flows of Khan Tengri Holding B.V. was 21.09% (2020: 18.63%), and cash flows beyond the five-year period were extrapolated taking into account a growth rate of 1.5% (2020: 1.5%). The pre-tax discount rate applied to projected cash flows of Kcell JSC was 19.56% (2020: 17.88%), and cash flows beyond the five-year period were extrapolated taking into account a growth rate of 1.5% (2020: 1.5%).
- The recoverable amount of IP TV CGU has been determined based on a value in use calculation using cash flow projections from financial budgets approved by senior management covering a five-year period. The pre-tax discount rate applied to the cash flow projections is 16.94% (2020: 15.02%), and cash flows beyond the five-year period are extrapolated using a 1.5% growth rate (2020: 1.5%).

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Goodwill (continued)

Khan Tengri Holding B.V., Kcell JSC and IP TV (continued)

The calculation of value-in-use for IPTV and fair value less costs of disposal for Khan Tengri Holding B.V. and Kcell JSC CGUs is most sensitive to the following assumptions:

- Customer base over the forecast period and average revenue per customer with direct impact on revenue growth rates;
- The level of capital investments included in the financial plan;
- EBITDA margin included in the financial plan;
- Growth rate for cash flow extrapolation beyond the forecast period;
- Discount rate.

As a result of this analysis, the Group has not identified an impairment of goodwill related to these CGUs as at December 31, 2021.

Sensitivity to changes in assumptions − Khan Tengri Holding B.V., Kcell JSC

Although management expects that the market share owned by the Group will not grow over the forecast period, according to the financial plan, slowing growth of customer base or a decrease in the average revenue per customer, leading to a decrease in revenue from current business plan by more than 6.67% (2020: 6.30%), would result in a loss from impairment in Khan Tengri Holding B.V. CGU for 389 million tenge (2020: 721 million tenge) and by more than 11.87% (2020: 5.06%), would result in a loss from impairment in Kcell JSC: CGU for 177 million tenge (2020: 84 million tenge).

Increase in capital investments by more than 45% (2020: 85%) would result in loss from impairment in Khan Tengri Holding B.V. CGU for 3,481 million tenge (2020: 1,415 million tenge) and more than 154% (2020: 91.5%) would result in loss from impairment in Kcell JSC CGU for 249 million tenge (2020: 189 million tenge).

Decrease in EBITDA margin by more than 8% (2020: 14%) would result in loss from impairment in Khan Tengri Holding B.V. CGU for 2,211 million tenge (2020: 980 million tenge) and more than 15% (2020: 11.2%) would result in loss from impairment in Kcell JSC CGU for 247 million tenge (2020: 204 million tenge).

Management recognises that the speed of technological change and the possibility of new entrants can have a significant impact on growth rate assumptions. A reduction to more than 17% (2020: 54.3% per annum in the long-term growth rate in Khan Tengri Holding B.V CGU would result in impairment loss for 208 million tenge (2020: 41 million tenge) and more than 11.15% (2020: 30.21% per annum in the long-term growth rate in Kcell JSC would result in impairment loss for 99 million tenge (2020: 261 million tenge).

An increase in pre-tax discount rate to 31% (2020: 33%) would result in impairment loss in Khan Tengri Holding B.V. CGU for 35 million tenge (2020: 2,399 million tenge) and to 38.8% (2020: 28.85%) would result in impairment loss in Kcell JSC CGU for 445 million tenge (2020: 271 million tenge).

Sensitivity to changes in assumptions − IP TV

Although the management expects that the market share owned by the Group would not grow over the forecast period, according to the financial plan, slowing growth of customer base or decrease in the average revenue per customer, leading to a decrease in revenue from current business plan by more than 8.08% (2020: 3.65%), would result in a loss from impairment in IP TV CGU for 59 million tenge (2020: 0.03 million tenge).

Increase in capital investments by more than 240% (2020: 95%) would result in loss from impairment in IP TV CGU for 3 million tenge (2020: 0.2 million tenge).

Management recognizes that the speed of technological change and the potential for new companies in the same industry to emerge can have a significant impact on its growth assumptions. A slower long-term growth rate for the IP TV business will not result in an impairment loss.

An increase in pre-tax discount rate to 27% (2020: 23.56%) would result in impairment loss in IP TV CGU for 48 million tenge (2020: 0.03 million tenge).

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Power generating assets

Impairment of non-financial assets

At each reporting date management assesses whether there is any indication of impairment of separate assets or groups of assets, and whether there is any indication that an impairment loss recognised in prior periods for separate assets or groups of assets other than goodwill may no longer exist or may have decreased.

Based on the results of the analysis carried out as of the end of 2021, management identified indicators of impairment of property, plant and equipment of the subsidiary − Almaty Electric Power Stations JSC ("ALES").

The Group engaged independent experts to perform an impairment test on ALES assets, which was conducted in accordance with IAS 36 *Impairment of Assets*.

The recoverable amount of property, plant and equipment and intangible assets determined based on estimates of estimated future cash inflows and outflows from the use of the assets, the discount rate and other indicators. Management classifies property, plant and equipment and intangible assets of each subsidiary as a single cash-generating unit as it is the smallest identifiable group of assets that generates cash inflows that are substantially independent of cash flows from other assets and the lowest level at which each the subsidiary controls the recovery of the value of the assets. Management estimated the recoverable amount of property, plant and equipment based on value in use, defined as the sum of the estimated discounted future cash flows that the Group expects to receive from their use.

Please refer *Note 29* for details on impairment test results.

Modernisation of Almaty CHP-2 with the minimization of the environmental impact

For the execution of the instructions of the President of the Republic of Kazakhstan on taking actions to minimize emissions to atmosphere, four modernization options for CHP-2 with the minimization of the environmental impact have been considered: transition of the existing boilers to gas flaring, reconstruction of the existing boilers with the installation of gas-handling equipment, extension of CHP-2 with the construction of CCGT plants and installation of additional gas-handling equipment without transition to natural gas and construction of a new gas-based plant.

On May 31, 2021, the Government of the Republic of Kazakhstan approved a proposal for the construction of a CCGT plant with a capacity of 600 MW at the site of Almaty CHP-2.

During the meeting, the Prime Minister of the Republic of Kazakhstan instructed the Ministry of Energy, together with interested state bodies, Samruk-Kazyna JSC, in accordance with the procedure established by law, to work out the issue of introducing amendments and additions to the Law of the Republic of Kazakhstan *On Electricity* in terms of providing the opportunity to implement projects to existing energy producers aimed at solving the environmental situation through the mechanism of the electric power market.

The Prime Minister of the Republic of Kazakhstan also instructed Samruk-Energy JSC, together with the Ministry of Energy, to continue, in the prescribed manner, to attract a bank loan to finance the project of transferring CHP-2 to gas, including the installation of gas infrastructure. As part of this instruction, the Company is working to organize project financing through loan raising.

In order to implement the project to upgrade the Almaty CHP-2, draft amendments to the Law of the Republic of Kazakhstan *On Electric Power Industry* have been prepared, stipulating the provision of an individual capacity tariff to energy producers implementing investment projects for modernization, reconstruction and/or expansion with the construction of generating plants using gas as alternative fuel type to reduce emissions. The conclusion on the draft amendments to the Law of the Republic of Kazakhstan *On Electric Power Industry* was agreed by the Government of the Republic of Kazakhstan and sent to the Majilis of the Parliament of the Republic of Kazakhstan. The amendments are expected to be adopted in April 2022.

The introduction of these amendments to the Law of the Republic of Kazakhstan *On Electric Power Industry* will provide the Group with a return on borrowed funds and a return on investment in the future due to the mechanism of the electric power market.

On December 30, 2021, a positive conclusion was received from RSE "Gosexpertiza" No. 02-0210/21 on the feasibility study project of modernization of CHP-2 with minimization of environmental impact with an option of construction of a new gas station with a capacity of up to 600 MW at the site of Almaty CHP-2.

The project for the modernization of CHPP-2 provides for the conservation of the existing capacities of CHP-2 after commissioning new gas station. The Group's management plans to complete the project of converting CHP-2 to gas by December 31, 2026.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Power generating assets (continued)

Modernisation of Almaty CHP-2 with the minimization of the environmental impact (continued)

Estimation of the recoverable amount of property, plant and equipment of CHP-2

At December 31, 2021, the Group's management considered that obtaining a positive opinion from RSE "Gosexpertiza" on the feasibility study of the CHP-2 modernization project with minimization of environmental impact with the option of building a new gas station with a capacity of up to 600 MW at the site of Almaty CHP-2 (the "project of conversion of CHPP-2 to gas") and the mothballing of the existing capacities of CHP-2 were an indicator of asset impairment and decided to assess the recoverable amount of property, plant and equipment.

Management engaged an independent expert, Grant Thornton Appraisal LLP, to perform an impairment test in accordance with IAS 36 *Impairment of Assets*.

Management has estimated the recoverable amount of the property, plant and equipment based on estimated future cash inflows and outflows from the use of the assets, the discount rate and other indicators.

The Group's management classifies all property, plant and equipment as a single cash-generating unit as it is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash flows generated by other assets and the lowest level at which the Group exercises control over recovery of the assets' value. Management has estimated the recoverable amount of property, plant and equipment based on value in use, which is the sum of the estimated discounted future cash flows that the Group expects to receive from their use.

The key assumptions used by management in determining value in use are:

<u>Projected volumes and tariffs for the sale of electricity and heat and the service of maintaining the readiness of electric power</u>

In accordance with the Law of the Republic of Kazakhstan *On the Electricity Industry*, the energy producer independently sets the selling price for electricity, but not higher than the cap tariff for electricity of the corresponding group of energy producers selling electricity and, if necessary, the price is adjusted. The cap tariff is approved by the Ministry of Energy of the Republic of Kazakhstan for groups of energy producers, formed by the type of power plants, installed capacity, type of fuel used, distance from the location of the fuel.

By Order of the Minister of Energy of the Republic of Kazakhstan dated December 5, 2018 No. 475 *On Approval of a Group of Energy Producers Selling Electricity* Samruk-Energy JSC is defined as a separate 26th group of energy producers. By Order of the Ministry of Energy of the Republic of Kazakhstan dated June 24, 2021 No. 211 *On Amendments to the Order of the Minister of Energy of the Republic of Kazakhstan* dated December 14, 2018 No. 514 *On Approval of Cap Tariffs for Electricity* the Group's electricity tariff is 10.23 tenge/kWh (excluding VAT) from July 1, 2021 for a period of five years, broken down by years. At the same time, in accordance with the Law of the Republic of Kazakhstan *On Supporting the Use of RES*, from July 1, 2021, a surcharge was introduced to support the use of renewable energy sources for conditional consumers in 1 electric energy consumption zone for 2021 in the amount of 1.57 tenge/kWh (excluding VAT) and for 2022 in the amount of 1.58 tenge/kWh (excluding VAT). Thus, the selling tariff for the Group's electricity for 2021 is 11.80 tenge/kWh (excluding VAT) and for 2022 11.81 tenge/kWh (excluding VAT).

In reference to the instruction of the Head of State, a moratorium was introduced on raising tariffs for regulated utilities, namely water supply, sewerage, heat supply, gas supply and electricity supply until July 1, 2022, the forecast for the cap tariff for electricity per unit kWh. in the first half of 2022 is based on the tariff approved by Order of the Minister of Energy of the Republic of Kazakhstan No. 211 dated June 24, 2021. Starting from the second half of 2022, the projected tariff was calculated using the rules for approving the cap tariff for electricity.

In accordance with the Group's plans to complete the project of converting CHP-2 to gas by December 31, 2026, cash flows after 2026 were calculated without taking into account the cash flows of CHP-2. The tariff for electricity in 2027 was also calculated taking into account the disposal of CHP-2 assets.

After the introduction of amendments to the Law of the Republic of Kazakhstan *On the Electricity Industry* it is expected that investments in the construction of a new plant will be fully reimbursed through the electric power market.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Power generating assets (continued)

Modernisation of Almaty CHP-2 with the minimization of the environmental impact (continued)

Estimation of the recoverable amount of property, plant and equipment of CHP-2 (continued)

Projected volumes and tariffs for the sale of electricity and heat and the service of maintaining the readiness of electric power (continued)

The sales volume forecast was made based on information from previous years and management’s expectations in accordance with the Group’s Development Plan for 2022-2026. The volume of electricity sales is projected to be approximately at the level of 2022.

	2022	2023	2024	2025	2026	2027
Electricity sales volume, million kWh	4,835	4,835	4,835	4,835	4,835	2,611
Volume of sales of electric capacity per year at the cap tariff, MW*month	781	781	781	850	850	470
Volume of sales of electrical capacity per year at an individual tariff, MW*month	70	70	70	–	–	–
Selling tariff for electric energy, tenge/kWh	12.19	13.29	13.78	13.98	14.28	12.85
Cap tariff for capacity thousand tenge / MW*month	590	590	590	590	619	619
Individual tariff for capacity thousand tenge/ MW*month	3,139	3,139	2,479	–	–	–

The individual capacity tariff is determined in accordance with an individual investment agreement with the Ministry of Energy of the Republic of Kazakhstan and is aimed at covering the annual principal repayments on refinanced loans raised to finance the project “Reconstruction and expansion of Almaty CHP-2. III tranche. Boiler unit No. 8”, until the maturity of the loans in 2024.

If the selling tariff for electricity remains at the level of 11.81 tenge/kWh in the period 2022-2026, the replacement value of property, plant and equipment will decrease by 22,665 million tenge.

Projected volumes of sales of heat energy and chemically treated water and forecast of the level of tariffs

	2022	2023	2024	2025	2026	2027
Volume of heat energy sales, thousand Gcal	5,298	5,298	5,298	5,298	5,298	2,038
Sales volume of chemically treated water, thousand tons	29,371	29,371	29,371	29,371	29,371	4,661
Tariff for the production of heat energy, tenge/Gcal	3,703	3,820	3,911	4,004	4,096	6,244
Tariff for production of chemically treated water, tenge/ton	60.86	60.99	61.07	61.15	61.15	81.19

The heat sales forecast was made based on information for previous years and management’s expectations in accordance with the Group’s Development Plan for 2022-2026. The volume of sales of heat energy and chemically treated water is projected at the level of 2022. The decrease in sales in 2027 is due to the disposal of the existing assets of CHP-2.

The tariff for heat generation per Gcal unit in the first half of 2022 is based on the approved tariff. From the second half of 2022 to 2026, the tariff is calculated at the level of approved tariffs, adjusted for the forecast fuel cost as an emergency regulatory measure. Starting from 2027, with the disposal of the operating assets of CHP-2, the heat tariff is expected to maintain a break-even level of profitability from heat in the long term for terminal cost calculation.

The tariff for the production of chemically treated water per ton in 2022-2026 is based on the approved tariffs. From 2027, the tariff is predicted taking into account the disposal of the existing assets of CHP-2.

In the event of a decrease/increase in sales of electricity, heat and chemically treated water by 10%, the replacement value of property, plant and equipment would decrease by 31,189 million tenge / increase by 31,236 million tenge.

In the event of a 10% decrease/increase in the cap tariffs for the sale of electricity, heat and chemically treated water, the replacement value of property, plant and equipment would decrease by 25,370 million tenge /increase by 25,397 million tenge.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Power generating assets (continued)

Modernisation of Almaty CHP-2 with the minimization of the environmental impact (continued)

Discount rate

The cash flows were discounted using an after-tax interest rate of 12.68% per annum, which was determined based on the Samruk-Energy’s weighted average cost of capital. Should the discount increase/decrease by 1%, the replacement value of property, plant and equipment would decrease by 4,854 million tenge/increase by 5,916 million tenge.

Long-term inflation rate

The long-term inflation rate used to calculate the terminal value is 3.24% per annum.

Volume of capital expenditures

In millions of tenge	2022	2023	2024	2025	2026	2027
Volume of capital expenditures	9,928	5,553	5,175	3,353	5,415	3,445

As a result of the test, the value in use of property, plant and equipment and intangible assets at December 31, 2021 was determined to be 61,243 million tenge, which is higher than their carrying amount. The Group recognized an impairment loss on property, plant and equipment and intangible assets in the amount of 20,737 million tenge.

At December 31, 2020, there were no indications of impairment.

Analysis of the impairment indicators of power generating property, plant and equipment

The Group’s management performed the analysis of the impairment indicators of property, plant and equipment of subsidiaries Ekibastuz GRES-1 named after Bulat Nurzhanov LLP (“EGRES-1”), Alatau Zharyk Company JSC (“AZhK”), “Tegis Munai” LLP, “Mangyshlak Munai” LLP (hereinafter “Tegis Munai”) and “Station Ekibastuzskaya GRES-2” JSC (hereinafter “EGRES-2”) in accordance with IAS 36 *Impairment of Assets*.

The principal facts and assumptions used in the analysis of the impairment indicators are:

- Lack of negative changes in the economic efficiency of subsidiaries for the reporting period;
- Changes in interest rates on loans and long-term inflation rate are not significant;
- Lack of significant changes having adverse consequences for subsidiaries, which occurred during the period or may presumably occur in the nearest future;
- Projected growth in the medium term in demand for electricity in the northern and southern zones of the Republic of Kazakhstan;
- Increase in marginal electricity tariffs for energy producing organisations (hereinafter referred to as “EPO”) from July 1, 2021 in accordance with the Order of the Minister of Energy of the Republic of Kazakhstan No. 211 dated June 24, 2021, taking into account the rate of return determined in accordance with the Methodology for determining the rate of return;
- Changes in the Legislation in the field of electric power industry, in terms of the introduction from July 1, 2021 of the mechanism of a “through” surcharge to support the use of renewable energy sources (hereinafter “RES”). These changes were introduced in order to improve the cost accounting mechanism for the purchase of electricity by traditional EPOs and according to which, a surcharge for supporting the use of renewable energy sources is added to the maximum tariff of traditional EPOs, which eliminates losses incurred when purchasing electricity from renewable energy sources.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Power generating assets (continued)

Analysis of the impairment indicators of power generating property, plant and equipment (continued)

Additional facts and assumptions used in the analysis of impairment indicators for EGRES-1:

- Over fulfilment of the plan in terms of key operational and financial performance indicators as of December 31, 2021;
- Projected increase in electricity sales volumes due to the commissioning of power unit No. 1 from 2026;
- Receipt of an individual tariff for services to maintain the readiness of electric power, ensuring a return on investment under the project "Restoration of power unit No. 1 with the installation of new electrostatic precipitators" with commissioning in 2024 (investment agreement with the Ministry of Energy of the Republic of Kazakhstan dated February 22, 2021).

Additional facts and assumptions used in the analysis of indicators of impairment for EGRES-2:

- Over fulfilment of the plan in terms of key operational and financial performance indicators as of December 31, 2021;
- Projected increase in electricity sales volumes due to the commissioning of power unit No. 3 from 2026;
- A significant increase in the electricity tariff − from 9.13 tenge/kWh to 9.69 tenge/kWh from April 1, 2021, and an increase to 10.16 tenge/kWh from July 1, 2021.

Additional facts and assumptions used in the analysis of indicators of impairment for AZhK:

- Over fulfilment of the plan in terms of key operational and financial performance indicators as of December 31, 2021;
- Projected growth in the medium term in demand for electricity in Almaty and the Almaty region.

Based on analysis performed with respect to internal and external impairment indicators, the Group's management concluded that there are no impairment indicators as of the analysis date. Therefore, the Group's management decided not to perform the impairment test of property, plant and equipment and intangible assets of these subsidiaries as of December 31, 2021.

Start date of gas production by Tegis Munai LLP

It is forecasted that natural gas production will commence in 2024, and it is assumed that 65% of gas production will be exported starting from 2024.

The gas production commencement is postponed because the contract territory is included in the territory of South-Kazakhstan state conservation area, where it is prohibited to perform field facilities construction and development prior to territory separation from the protected areas.

The Group's management is working to coordinate the expansion of the boundaries of the protected area, taking into account the withdrawal of the contract area, together with authorised state institutions. Management believes that there is a high probability of a favorable decision in favor of the Group, based on the experience of other companies that are part of the Group, whose contract areas were also located on the territory of the South Kazakhstan State Reserve Zone, but subsequently received permits to conduct mining.

Therefore, Tegis Munai contacted the Ministry of Energy of RK ("ME RK") with the question of the relevance of production period commencement extension, field facilities construction for gas production, postponement of deadline for the implementation of working program and contract's validity period since the issue of contract territory separation is not settled yet. In September 2020, the subsurface use expert commission of ME RK decided to postpone the following financing liabilities: education; R&D; social and economic development of the region, and an abandonment was given in terms of working program amendment on investment liabilities under subsurface use contract.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Power generating assets (continued)

Start date of gas production by Tegis Munai LLP (continued)

On December 3, 2020, Tegis Munai has sent an application to the Supreme Court of the Republic of Kazakhstan on invalidation of the ME RK abandonment in terms of working program amendment on investment liabilities under subsurface use contract. On December 30, 2020, Tegis Munai received force-majeure certificate from the Chamber of Commerce of Kazakhstan LLP comprising Atameken NCE confirming that Tegis Munai is not able to perform subsurface use contract commitments prior to the contract territory separation from the protected areas and is not able to perform subsurface use operations. Force-majeure circumstances are in force until the contract territory separation from the protected areas.

On September 15, 2021, due to the ongoing process to withdraw the contract area from the protected area, the Group received a new certificate regarding the duration of circumstances of undetermined force from the Foreign Trade Chamber of Kazakhstan LLP.

Assets related to uranium production

Assets related to uranium mines include property, plant and equipment, mine development assets, mineral rights, exploration and evaluation assets, investments in associates, investments in joint ventures, and other investments.

For the purpose of impairment testing assets are grouped at the lowest levels for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets (termed as 'cash-generating units'). The Group has identified each mine (contract territory) as a separate cash-generating unit unless several mines are technologically connected with single processing plant in which case the Group considers such mines as one cash-generating unit.

As at December 31, 2021, management conducted an analysis and did not find any impairment indicators of assets (generating units) associated with the production of uranium products.

Assets retirement obligations

Oil and gas production facilities

Under the terms of certain subsoil use contracts, legislation and regulations the Group has legal obligations to dismantle and remove tangible assets and restore the land at each production site. Specifically, the Group's obligation relates to the ongoing closure of all non-producing wells and final closure activities such as removal of pipes, buildings and recultivation of the contract territories, and also obligations to dismantle and remove tangible assets and restore territory at each production site. Since the subsoil use contract terms cannot be extended at the discretion of the Group, the settlement date of the final closure obligations has been assumed to be the end of each subsoil use contract period. The extent of the Group's obligations to finance the abandonment of wells and for final closure costs depends on the terms of the respective subsoil use contracts and current legislation.

Where neither subsoil use contracts nor legislation include an unambiguous obligation to undertake or finance such final abandonment and closure costs at the end of the subsoil use contract term, no liability has been recognized. There is some uncertainty and significant judgment involved in making such a determination. Management's assessment of the presence or absence of such obligations could change with shifts in policies and practices of the Government or in the local industry practice.

The Group calculates asset retirement obligations separately for each contract. The amount of the obligation is the present value of the estimated expenditures expected to be required to settle the obligation adjusted for expected inflation and discounted using average long-term risk-free interest rates for emerging market sovereign debt adjusted for risks specific to the Kazakhstan market.

At each reporting date the Group reviews site restoration provisions, and adjusts them to reflect the current best estimate in accordance with IFRIC 1 *Changes in Existing Decommissioning, Restoration and Similar Liabilities*.

Estimating the future closure costs involves significant estimates and judgments by management. Most of these obligations are many years in the future and, in addition to ambiguities in the legal requirements, the Group's estimate can be affected by changes in asset removal technologies, costs and industry practice. The Group estimates future well abandonment cost using current year prices and the average long-term inflation rate.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Assets retirement obligations (continued)

Oil and gas production facilities (continued)

The long-term inflation and discount rates used to determine the obligation in the consolidated statement of financial position across the Group entities at December 31, 2021 were in the range from 2.23% to 8.10% and from 3.80% to 10.25%, respectively (December 31, 2020: from 2.00% to 7.3% and from 3.68% to 11.00%, respectively). As at December 31, 2021 the carrying amounts of the Group’s asset retirement obligations relating to decommissioning of oil and gas facilities were 174,913 million tenge (December 31, 2020: 156,671 million tenge) *(Note 22)*.

Major oil and gas pipelines

According to the Law of the RK *On Major Pipelines* which was made effective on July 4, 2012 KazTransOil JSC (further − “KTO”) has legal obligation to decommission its major oil pipelines at the end of their operating life and to restore the land to its original condition. Asset retirement obligation is calculated based on estimate of the work to decommission and rehabilitate. As at December 31, 2021, the carrying values of the Group’s asset retirement obligations relating to decommissioning of pipelines and land were 34,547 million tenge (December 31, 2020: 113,558 million tenge) *(Note 22)*.

Assets related to uranium production

In accordance with environmental legislation and the subsurface use contracts, the Group has a legal obligation to remediate damage caused to the environment from its operations and to decommission its mining assets and landfills and restore landfill sites after closure of mining activities. Provision is made based upon the net present values of estimated site restoration and retirement costs as soon as the obligation arises from past mining activities.

The provision for asset retirement obligations is estimated based upon the Group’s interpretation of current environmental legislation in the Republic of Kazakhstan and the Group’s related programme for liquidation of subsurface use consequences on the contracted territory and other operations supported by the feasibility study and engineering research in accordance with the applicable restoration and retirement standards and techniques.

Provisions for asset retirement obligations are subject to potential changes in environmental regulatory requirements and the interpretation of the legislation. Provisions for mining assets and landfills retirement obligations are recognised when there is a certainty of incurring of such liabilities and when it is possible to measure the amounts reliably.

The calculation of the provision for production assets retirement as at December 31, 2021 was performed by the Group based upon assessments performed by independent and internal consultants. The scope of work stipulated by the legislation and included in the calculations included the dismantling of facilities and infrastructure (pumping, injection and observation wells, technological units for acidification and distribution of solutions, pipelines, access roads, technological sites, landfills, buildings and other facilities) and subsequent restoration of land.

Principal assumptions used in such estimations include the estimate of discount rate and the amount and timing of future cash flows. The discount rate is applied to the nominal costs that management expects to spend on mining site restoration in the future.

Management’s estimates based on current prices are inflated using the expected long-term inflation rate of 5.12% in 2021 (2020: 5.17%), and subsequently discounted using a rate that reflects the current market estimates of the time value of money and those risks specific to the liability not reflected in the best estimate of the costs. The discount rate is based on a risk-free rate determined as interest rates on government bonds with the maturity as the average of Group subsoil use contracts. The discount rate used by the Group’s companies for calculation of the provision as at December 31, 2021 is 9.85% (2020: 9.87%).

At December 31, 2021, the carrying value of the site restoration provision was 31,431 million tenge (2020: 23,841 million tenge) *(Note 22)*. The increase is mainly attributable to the estimated cost of reclamation at RU-6 LLP (a wholly owned entity) as its mining allotment includes arable lands, pastures and the Kargaly state nature reserve.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Assets retirement obligations (continued)

Decommissioning of the Ulba plant facility

Management has assessed whether the Group has an obligation for decommissioning and dismantling of the production facility of Ulba Metallurgical Plant JSC and concluded that the Group has no legal obligation to decommission this facility at the end of its useful life as of December 31, 2021 and 2020.

In addition, management considered the extent to which the Group's policies and statements may have created a constructive obligation to decommission this production facility and concluded that no liability should be recorded as:

- Radiation contamination of the facility is limited and the costs involved in remediation are not significant.
- In the event of discontinuance of production activities, the Group will not have an obligation to liquidate buildings and other infrastructure. In addition, the possibility exists of redeployment of the production facilities to alternative uses.
- Timely inspections, surveys, repair work to reduce physical damage and maintain the normal level of performance of structures and engineering equipment can extend the useful life of the facility for an indefinite period. These factors together with the extended periods over which the Group's uranium reserves are available to be mined mean that it is not practical to estimate a reliable closure date for the UMP production facility.

In the event of future changes in environmental legislation and in the field of the use of atomic energy or its interpretation, as well as the Group's policy, obligations may arise which could require recognition as liabilities in the financial statements.

Provision for environmental remediation

The Group also makes judgments and estimates in establishing provisions for environmental remediation obligations. Environmental expenditures are capitalized or expensed depending upon their future economic benefit. Expenditures that relate to an existing condition caused by past operations and do not have a future economic benefit are expensed.

Liabilities are determined based on current information about costs and expected plans for remediation and are recorded on discounted basis. The Group's environmental remediation provision represents management best estimate based on an independent assessment of the anticipated expenditure necessary for the Group to remain in compliance with the current regulatory regime in Kazakhstan and Europe. The Group has classified this obligation as non-current except for the portion of costs, included in the annual budget for 2022. For environmental remediation provisions, actual costs can differ from estimates because of changes in laws and regulations, public expectations, discovery and analysis of site conditions and changes in clean-up technology. Movements in the provision for environmental remediation obligations are disclosed in *Note 22*.

Provision for taxes

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the wide range of the Group's international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to taxable profits and expense already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries in which it operates.

The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences of interpretation may arise on a wide variety of issues depending on the conditions prevailing in the respective Group company's domicile.

In assessing tax risks, management considers to be probable obligations the known areas of non-compliance with tax legislation, which the Group would not appeal or does not believe it could successfully appeal, if additional taxes are charged. Such determinations inherently involve significant judgment and are subject to change as a result of changes in tax laws and regulations, amendments to the taxation terms of the Group's subsurface use contracts, the determination of expected outcomes from pending tax proceedings and current outcome of ongoing compliance audits by tax authorities. The provision for taxes disclosed in *Note 22* relates mainly to the Group's application of Kazakhstan transfer pricing legislation. Further uncertainties related to taxation are disclosed in *Note 37*.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Provision for construction of social objects

The Government assigns various sponsorship and financing obligations to the Group. Management of the Group believes that such Government's assignments represent constructive obligations of the Group and require recognition on the basis of respective resolution of the Government of the Republic of Kazakhstan. Furthermore, as the Government is the ultimate controlling party of the Group, the expenditures on these assignments are recognized as "other distributions to the Shareholder" directly in the equity.

Useful lives of items of property, plant and equipment

The Group assesses remaining useful lives of items of property, plant and equipment at least at each financial year-end. If expectations differ from previous estimates, the changes are accounted for prospectively as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

Deferred tax assets

Deferred tax assets are recognized for all allowances and unused tax losses to the extent that it is probable that taxable temporary differences and business nature of such expenses will be proved. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies. The carrying amount of recognized deferred tax assets as at December 31, 2021 was equal to 69,148 million tenge (December 31, 2020: 79,267 million tenge). Further details are contained in *Note 33*.

Fair value of financial instruments

Where the fair value of financial assets and financial liabilities recorded in the consolidated statement of financial position cannot be derived from active markets, they are determined using valuation techniques including the discounted cash flows model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values.

The judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the fair value of financial instruments reported in the consolidated financial statements. Further details are disclosed in *Note 36*.

Employee benefit liability

The Group uses actuarial valuation method for measurement of the present value of defined employee benefit liability and related current service cost. This involves use of demographic assumptions about the future characteristics of current and former employees who are eligible for benefits (mortality, both during and after employment, rates of employee turnover, etc.) as well as financial assumptions (discount rate, future annual financial assistance, future annual minimum salary and future average railway ticket price).

Due to the complexity of the valuation, the underlying assumptions and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

Estimation of expected credit losses

The measurement of impairment losses under IFRS 9 across all categories of financial assets requires judgement, in particular, the estimation of the amount and timing of future cash flows and collateral values when determining impairment losses and the assessment of a significant increase in credit risk. These estimates are driven by a number of factors, changes in which can result in different levels of allowances.

The Group's ECL calculations are outputs of complex models with a number of underlying assumptions regarding the choice of variable inputs and their interdependencies. Elements of the ECL models that are considered accounting judgements and estimates include:

- The Group's credit grading model, which assigns PDs to the individual grades;
- The segmentation of financial assets when their ECL is assessed on a collective basis;
- Development of ECL models, including the various formulae and the choice of inputs;
- Determination of associations between macroeconomic scenarios and, economic inputs, such as oil price with one year lag, and the effect on PDs, EADs and LGDs.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (continued)

Accounting treatment of financing arrangements with Industrial Development Fund JSC

The Group, represented by Passenger Transportation JSC and Tulpar Wagon Construction Plant LLP, entered into a number of trilateral purchase-sale and finance lease agreements with Industrial Development Fund JSC, which is under the common control of the Shareholder, to renew its passenger carriage fleet. Under the agreements, Industrial Development Fund JSC finances Tulpar Wagon Construction Plant LLP's construction of passenger carriages on a 100% prepayment basis for ownership with a further finance lease to Passenger Transportation JSC.

Management of the Group concluded that the transaction between Tulpar Wagon Construction Plant LLP and Industrial Development Fund JSC does not meet the requirements of IFRS 15 *Revenue from Contracts with Customers* to account for the asset sale at the Group level, as control over passenger carriages is not transferred to Industrial Development Fund JSC, but left with the Group.

Industrial Development Fund JSC finances the construction of the carriages, but is limited in its ability to direct the subsequent use of and obtain all of the remaining benefits from the asset. Accordingly, the Group recognises the obligation to Industrial Development Fund JSC as a financial liability (borrowing) according to IFRS 9 *Financial Instruments* and recognises passenger carriages and work-in-progress as property, plant and equipment items and construction in progress in accordance with IFRS 16.103 *Leases*.

Since financing was provided at preferential interest rates and the terms were provided exclusively to finance the upgrade of the Passenger Transportation JSC passenger carriage fleet based on a Kazakhstan Government Resolution, the Group considers these transactions as transactions with the Shareholder and recognises fair value adjustments of the loans received at below market rate through equity within retained earnings as other transactions with the Shareholder *(Note 17)*.

Swap transactions

The Group sells part of its uranium products under swap transactions with separate agreements with the same counterparty, being for sales and purchase of the same volume of uranium for the same price at different delivery points or different timeframes. Effectively, this results in the exchange of own uranium (produced or purchased from the Group's entities) with purchased uranium.

Normally, under a swap transaction, the Group delivers physical uranium to one destination point, and purchases the same volume of uranium at a third party converter for sale to end customers. Swap transactions are entered into primarily to reduce transportation costs for uranium delivery from Kazakhstan to end customers.

Despite the fact that swap agreements are not formally related to each other, management concluded that these transactions are in substance linked and would not have occurred on an isolated basis, driven by the existing market demand and supply forces. In management's view, supply of the same volume of homogeneous product (uranium) for the same price represents an exchange of products, which should be presented on a net basis in the consolidated financial statements, reflecting the economic substance of the transaction. Interpretation of terms and approach to the accounting for swap transactions requires judgement.

In 2021, the Group did not recognise sales revenue from swap transactions of 146,910 million tenge and cost of sales of 135,158 million tenge. In 2020, the Group did not recognise sales revenue from swap transactions of 71,331 million tenge, cost of sales of 65,713 million tenge.

Control over DP Ortalyk LLP

On July 22, 2021 the Group completed the sale of a 49% interest in DP Ortalyk LLP *(Note 17)*. The Group retains a 51% ownership interest and majority voting rights in the Supervisory Board. Sales activities of DP Ortalyk LLP are governed by the Marketing agreement, any amendments to which would require consent by both owners. The Group governs production activity within the 20% limit permitted by law through its power to approve the entity's budget by simple majority vote. Decisions about financing of DP Ortalyk LLP are made by unanimous consent of both owners. Currently, DP Ortalyk LLP does not rely on shareholders' or external financing. Given that all production volumes are committed to be purchased by the Group and CGNPC based upon market prices, production volumes and costs have the most significant impact on financial results and therefore are considered to be relevant activities for the purpose of the control assessment. Based on these facts, the Group management has concluded that the Group retains control over DP Ortalyk LLP.

5. DISPOSALS AND ASSETS CLASSIFIED AS HELD FOR SALE OR DISTRIBUTION TO THE SHAREHOLDER

Disposals in 2021

Financial Settlement Center of Renewable Energy LLP

In December 2021, in accordance with the Resolution of the Government of the Republic of Kazakhstan dated November 30, 2021, the Group transferred shares of Financial Settlement Center of Renewable Energy LLP to the State property and privatization committee of the Ministry of Finance of Republic of Kazakhstan with the net assets of 37,122 million tenge free of charge *(Note 17)*. This transaction was recognized as transfer of assets to the Shareholder in consolidated statement of changes in equity.

Net assets of Financial Settlement Center of Renewable Energy LLP as at the transfer date are as follows:

In millions of tenge	**At the date of transfer**
Assets	
Property and equipment	28
Intangible assets	15
Deferred tax assets	235
Inventories	155
Trade receivables	25,792
Amounts due from credit institutions	38
Other current financial assets	5,113
Other current assets	2
Cash and cash equivalents	38,848
Assets transferred to the Shareholder	**70,226**
Liabilities	
Trade and other payables	31,602
Income taxes payable	261
Other non-current and current liabilities	1,241
Liabilities directly associated with the assets transferred to the Shareholder	**33,104**
Net assets directly associated with the disposal group	**37,122**

Vostokmashzavod JSC

On December 30, 2020 the Group, represented by its subsidiary Repair Corporation Kamkor LLP, entered into a sale agreement with a third party to sell shares of Vostokmashzavod JSC.

The Group classified the assets and liabilities of Vostokmashzavod JSC as at December 31, 2020 as assets held for sale measured at the lower of carrying amount and fair value less costs to sell. On January 8, 2021 the Group completed sale transaction of the shares of Vostokmashzavod JSC, and, as a result, lost control over the subsidiary.

Assets and liabilities in the separate statements of Vostokmashzavod JSC at the date of disposal amounted 6,656 million tenge and 9,980 million tenge, respectively.

The result of disposal of the subsidiary is as follows:

In millions of tenge	
Advance received previously	100
Disposed net liabilities	3,324
Disposed non-controlling interest	(849)
Adjustment to fair value of loans receivable and receivables from a former subsidiary	(2,575)
Net result from disposal of Vostokmashzavod JSC	**–**

As at the date of disposal Vostokmashzavod JSC had loans and trade payables due to the Group with a carrying value of 5,529 million tenge and 938 million tenge, respectively. Under the transaction for the acquisition of share in Vostokmashzavod JSC, the buyer guaranteed the repayment of this debt. Therefore, as a result of disposal, the Group recognized loans receivable and receivables at their fair value of 3,251 million tenge and 641 million tenge, respectively, reflecting the adjustment to fair value in the reconciliation above.

As a result, the disposal of Vostokmashzavod JSC in 2021 did not have an impact on the financial result.

5. DISPOSALS AND ASSETS CLASSIFIED AS HELD FOR SALE OR DISTRIBUTION TO THE SHAREHOLDER (continued)

Disposals in 2021 (continued)

Shokpar-Gagarinskoye LLP

At December 31, 2020, assets and liabilities of a subsidiary Shokpar-Gagarinskoye LLP were classified as an assets held for sale and liabilities directly associated with the assets held for sale and were equal to 2,056 million tenge and 1 million tenge.

On July 9, 2021, the Group completed the sale of 100% shares of Shokpar-Gagarinskoye LLP to a third party for 4,185 million tenge.

Net assets of Shokpar-Gagarinskoye LLP as at the disposal date are as follows:

In millions of tenge	**At the date of disposal**
Assets	
Property and equipment	2,056
Cash and cash equivalents	1
Assets held for sale	**2,057**
Liabilities	
Trade payables	2
Other current liabilities	10
Liabilities directly associated with the assets held for sale	**12**
Net assets directly associated with the disposal group	**2,045**

Net cash inflow from disposal of a subsidiary was as follows:

In millions of tenge	
Cash consideration received	2,953
Advance received previously	1,286
Less: cash and cash equivalents of disposed subsidiary	(1)
Total cash inflow	**4,238**

The resulting gain on disposal of Shokpar-Gagarinskoye LLP amounted to 2,140 million tenge.

KT Cloud Lab LLP

On June 17, 2019, the Group concluded an agreement on sale of KT Cloud Lab LLP. At December 31, 2020, assets and liabilities of KT Cloud Lab LLP were classified as an assets held for sale and liabilities directly associated with the assets held for sale and were equal to 1,872 million tenge and 895 million tenge.

In accordance with the agreement, payments shall be made in 3 tranches (the first tranche in the amount of 30% of the purchase price within 30 days after agreement signing date, the second tranche in the amount of 35% of the purchase price within 12 months after signing date and the third tranche in the amount of 35% of the purchase price within 24 months after signing date).

On July 14, 2021, the buyer made the first tranche under the purchase agreement in the amount of 30% of the purchase price. The buyer's intention to exercise his right to early repurchase the remaining stake in KT Cloud Lab LLP allowed the Group to recognize the disposal of KT Cloud Lab LLP from the moment of receipt of the first tranche and to recognize the payment arrears from the winner of the tender in full.

On October 20, 2021, the buyer repaid the remaining part of the purchase price ahead of the repayment schedule.

5. DISPOSALS AND ASSETS CLASSIFIED AS HELD FOR SALE OR DISTRIBUTION TO THE SHAREHOLDER (continued)

Disposals in 2021 (continued)

KT Cloud Lab LLP (continued)

Net assets of KT Cloud Lab LL as at the disposal date are as follows:

In millions of tenge	At the date of disposal
Assets	
Property and equipment	526
Intangible assets	484
Other non-current financial assets	77
Inventories	9
Trade receivables	916
Other current financial assets	164
Other current assets	39
Cash and cash equivalents	448
Assets held for sale	**2,663**
Liabilities	
Deferred tax liabilities	11
Trade payables	146
Other current liabilities	645
Liabilities directly associated with the assets held for sale	**802**
Net assets directly associated with the disposal group	**1,861**

Following is a schedule of consideration received from the disposal of KT Cloud Lab LLP:

In millions of tenge	
Cash consideration received	1,435
Less: cash disposed	(448)
Total cash consideration received	**987**

As a result of disposal the Group has recognized loss from disposal of the subsidiary of 426 million tenge.

Sales of 100% interests in subsidiaries − KazPV project

On June 10, 2021 the Group signed an agreement for the sale of the Group's entire interest in Kazakhstan Solar Silicon LLP. The sale was completed on July 12, 2021 upon receipt of full payment of 323 million tenge. At the date of loss of control net assets of Kazakhstan Solar Silicon LLP amounted to 85 million tenge.

On July 16, 2021 the Group signed an agreement for the sale of the Group's entire interest in Astana Solar LLP and on August 23, 2021 signed the act of acceptance after receiving full payment under the contract. The payment received amounted to 380 million tenge. At the date of loss of control net assets of Astana Solar LLP amounted to 115 million tenge.

On October 26, 2021, an agreement for the sale of the Group's entire interest in MK Kazsilicon LLP was signed. On November 19, 2021 after receiving full payment under the contract the Group signed an act of acceptance certificate. The payment received amounted to 652 million tenge. At the date of loss of control net liabilities of MK Kazsilicon LLP amounted to 136 million tenge.

Total proceeds from sales of KazPV entities was 1,355 million tenge less 16 million tenge cash and cash equivalents of disposed entities at the disposal date. Net income from disposal of KazPV subsidiaries amounted 1,291 million tenge.

5. DISPOSALS AND ASSETS CLASSIFIED AS HELD FOR SALE OR DISTRIBUTION TO THE SHAREHOLDER (continued)

Disposals in 2020

Transtelecom JSC

In April 2018, a purchase and sale agreement was concluded on the sale of 26% minus 1 (one) share of Transtelecom JSC. On January 24, 2020 the remaining balance of the purchase price was paid by the buyer for 26% minus 1 (one) share of Transtelecom JSC. On January 29, 2020 shares of Transtelecom JSC were disposed, as a result, the Group lost control over the subsidiary and recognised residual interest of 25% at fair value of 9,086 millon tenge as investment in associate and disposal of non-controlling interest in Transtelecom JSC of 14,040 million tenge in consolidated statement of changes in equity.

At the date of loss of control net assets of Transtelecom JSC were as follows:

In millions of tenge	Net assets at the date of disposal
Property, plant and equipment	85,466
Intangible assets	4,607
Other non-current financial assets	298
Other non-current assets	376
Inventories	2,307
VAT receivable	767
Income tax prepaid	169
Trade accounts receivable	8,333
Loans issued and finance lease receivables	798
Amounts due from credit institutions	27
Other current financial assets	626
Other current assets	11,545
Cash and cash equivalents	6,352
Total assets	**121,671**
Borrowings	53,139
Lease liabilities	1,853
Deferred tax liabilities	4,467
Employee benefit liabilities	504
Other non-current liabilities	2,472
Trade and other payables	18,841
Other current liabilities	7,646
Total liabilities	**88,922**
Net assets	**32,749**

Net cash inflow from disposal of a subsidiary was as follows:

In millions of tenge	
Cash consideration received	9,450
Advances received previously	(470)
Less: cash and cash equivalents of disposed subsidiary	(6,352)
Total cash inflow	**2,628**

Net of loss incurred by Transtelecom JSC for the period from January 1, 2020 till the date of sale amounted to 15 million tenge. The resulting loss on disposal of Transtelecom JSC amounted to 173 million tenge.

5. DISPOSALS AND ASSETS CLASSIFIED AS HELD FOR SALE OR DISTRIBUTION TO THE SHAREHOLDER (continued)

Disposals in 2020 (continued)

MC SEZ Khorgos-Eastern Gates JSC ("Khorgos")

In March 2020, in accordance with the Resolution of the Government of the Republic of Kazakhstan dated March 19, 2019 the Group transferred 100% of shares in Khorgos free of charge to the akimat of Almaty oblast. As a result, the Group lost control of Khorgos and recorded the disposal of net assets of 24,809 million tenge through equity in retained earnings.

The assets and liabilities of Khorgos as at the disposal date are as follows:

In millions of tenge	**Net assets at the date of disposal**
Property, plant and equipment	20,219
Intangible assets	555
Other non-current assets	2,734
Inventories	16
Trade accounts receivable	31
Other current assets	332
Cash and cash equivalents	1,886
Total assets	**25,773**
Employee benefit liabilities	3
Trade and other payables	847
Other current liabilities	114
Total liabilities	**964**
Net assets	**24,809**

Khorgos revenue and loss for the period from January 1 until the disposal date were 60 million tenge and 1,248 million tenge, respectively.

Uranium Enrichment Center JSC (TsOU)

In 2019 the Group has entered into a conditional contract to sell its 50% interest minus 1 (one) share in JSC Uranium Enrichment Center (TsOU) to its partner in this joint venture − TVEL JSC (TVEL). The Group maintained 1 share of TsOU, which will retain the Group's right to access uranium enrichment services in accordance with the conditions previously agreed with TVEL. On March 17, 2020 the Group completed this sale. The contract price was 6,253 million Russian rubles or 90 million euro fixed at an exchange rate as at December 31, 2019. Actual cash consideration received was 90 million Euro (equivalent to 43,858 million tenge).

In millions of tenge	
Contract price at the exchange rate as at December 31, 2019	40,485
Less: carrying value of the investment in joint venture	(18,671)
Transfer of foreign currency translation reserve	249
Gain from disposal of joint venture	**22,063**

Gain from disposal of joint venture was included in other non-operating income.

5. DISPOSALS AND ASSETS CLASSIFIED AS HELD FOR SALE OR DISTRIBUTION TO THE SHAREHOLDER (continued)

Assets classified as held for sale or distribution to the Shareholder

Assets classified as held for sale or distribution to the Shareholder comprised the following:

In millions of tenge	**Segment**	**December 31, 2021**	December 31, 2020
Assets classified as held for sale		**42,617**	61,360
Assets classified as held for distribution to Shareholder, including:		**104**	427
KOREM JSC	Energy	**–**	*323*
Other		***104***	*104*
		42,721	61,787

Liabilities associated with assets classified as held for sale or distribution to the Shareholder comprised the following:

In millions of tenge	**Segment**	**December 31, 2021**	December 31, 2020
Liabilities associated with assets classified as held for sale		**–**	4,814
Liabilities associated with assets classified as held for distribution to the Shareholder, including:		**–**	22
KOREM JSC	Energy	**–**	*22*
		–	4,836

On April 14, 2021 in accordance with the Resolution of the Government of the Republic of Kazakhstan dated March 17, 2021 the Group transferred shares of KOREM JSC to the State property and privatization committee of the Ministry of Finance of the Republic of Kazakhstan with net assets of 312 million tenge free of charge *(Note 17)*.

During 2021, the Group reclassified to assets held for sale property, plant and equipment of 45,451 million tenge mainly represented by compressor station “Aral” for 40,378 million tenge and property, plant and equipment of UTTiOS LLP for 5,009 million tenge.

During 2021, the Group sold the compressor station “Korkyt-ata”, which was reclassified to assets held for sale in 2020, for the consideration of 42,886 million tenge, of which 40,742 million tenge were paid as at December 31, 2021.

6. PROPERTY, PLANT AND EQUIPMENT

In millions of tenge	Oil and gas assets	Pipelines and refinery assets	Buildings and premises	Railway tracks and infra-structure	Machinery, equipment and vehicles	Mining assets	Other	Construc-tion in progress	Total
Net book value at January 1, 2020	4,232,980	2,186,306	1,152,396	1,134,626	3,207,696	164,837	169,953	900,390	13,149,184
Foreign currency translation	366,276	43,416	9,164	(70)	28,817	–	9,579	15,345	472,527
Changes in estimates	27,038	10,923	(195)	–	(1,032)	(13,552)	3,358	–	26,540
Additions	19,930	4,143	8,156	3,075	95,187	26,983	19,687	1,056,336	1,233,497
Additions through lease agreements	1,558	468	11,294	–	139,493	–	5,365	–	158,178
Acquisition through business combinations	–	–	10,979	–	12,212	–	3,046	1,079	27,316
Disposals	(18,443)	(29,041)	(17,528)	(134)	(73,516)	(3)	(4,746)	(7,304)	(150,715)
Depreciation charge	(271,726)	(149,339)	(72,040)	(36,788)	(330,223)	(27,308)	(20,722)	–	(908,146)
Depreciation and impairment on disposals	13,876	12,257	4,148	100	40,446	–	4,156	5,294	80,277
Impairment/write-off, net of reversal of impairment *(Note 29)*	(38,202)	(156,275)	3,268	26	(21,569)	(376)	(2,077)	(34,617)	(249,822)
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder	–	(834)	(24,223)	–	(77,813)	(2,055)	(1,054)	(1,274)	(107,253)
Transfers from/(to) intangible assets *(Note 7)*	(609)	(96)	–	–	31	–	(619)	(12,096)	(13,389)
Transfers from/(to) exploration and evaluation assets, investment property	67	–	(21,045)	–	(68)	26	(1)	–	(21,021)
Transfer from/(to) inventories, net	42	1,591	13	(5,098)	423	5,584	564	3,593	6,712
Other transfers and reclassifications	122,632	62,601	111,904	65,876	295,772	611	12,253	(671,649)	–
Net book value at December 31, 2020	4,455,419	1,986,120	1,176,291	1,161,613	3,315,856	154,747	198,742	1,255,097	13,703,885
Historical cost	6,207,948	3,607,779	1,764,392	1,447,389	5,812,284	338,271	375,664	1,374,385	20,928,112
Accumulated depreciation and impairment	(1,752,529)	(1,621,659)	(588,101)	(285,776)	(2,496,428)	(183,524)	(176,922)	(119,288)	(7,224,227)
Net book value at December 31, 2020	4,455,419	1,986,120	1,176,291	1,161,613	3,315,856	154,747	198,742	1,255,097	13,703,885

6. PROPERTY, PLANT AND EQUIPMENT (continued)

In millions of tenge	Oil and gas assets	Pipelines and refinery assets	Buildings and premises	Railway tracks and infra-structure	Machinery, equipment and vehicles	Mining assets	Other	Construc-tion in progress	Total
Including right-of-use assets under lease agreements									
Net book value at January 1, 2020	43,814	928	73,958	–	276,203	–	22,484	–	417,387
Foreign currency translation	4,180	144	1,408	–	21,192	–	2,432	–	29,356
Changes in estimates	–	5,009	(294)	–	(1,225)	–	3,358	–	6,848
Additions through lease agreements	1,558	468	11,294	–	139,493	–	5,365	–	158,178
Capitalized repair works	–	–	–	–	3,598	–	–	–	3,598
Acquisition through business combinations	–	–	939	–	1,659	–	–	–	2,598
Disposals	(1,305)	–	(1,040)	–	(42,499)	–	(922)	–	(45,766)
Depreciation charge	(7,300)	(296)	(17,086)	–	(57,998)	–	(3,225)	–	(85,905)
Depreciation and impairment on disposals	–	–	322	–	20,566	–	645	–	21,533
Impairment, net of reversal of impairment	–	–	–	–	(5,925)	–	–	–	(5,925)
Net book value at December 31, 2020	40,947	6,253	69,501	–	355,064	–	30,137	–	501,902
Historical cost of right-of-use assets under lease agreements	53,747	7,014	102,001	–	530,064	–	35,063	–	727,889
Accumulated depreciation and impairment of right-of-use assets under lease agreements	(12,800)	(761)	(32,500)	–	(175,000)	–	(4,926)	–	(225,987)
Net book value at December 31, 2020	40,947	6,253	69,501	–	355,064	–	30,137	–	501,902

6. PROPERTY, PLANT AND EQUIPMENT (continued)

In millions of tenge	Oil and gas assets	Pipelines and refinery assets	Buildings and premises	Railway tracks and infra-structure	Machinery, equipment and vehicles	Mining assets	Other	Construc-tion in progress	Total
Net book value at January 1, 2021	4,455,419	1,986,120	1,176,291	1,161,613	3,315,856	154,747	198,742	1,255,097	13,703,885
Foreign currency translation	98,734	8,465	1,522	19	9,795	–	2,585	4,725	125,845
Changes in estimates	11,268	2,710	(2,040)	–	1,219	5,474	1	–	18,632
Additions	55,688	5,238	10,921	55	125,910	38,510	5,391	1,144,165	1,385,878
Additions through lease agreements	3,570	32,599	6,445	–	89,991	–	4,320	–	136,925
Capitalized repair works on right-of-use assets	–	–	–	–	8,788	–	–	–	8,788
Lease modifications	–	(625)	3,949	–	1,001	–	(3,532)	–	793
Disposals	(38,685)	(49,215)	(16,789)	(4,296)	(63,503)	(950)	(7,094)	(1,378)	(181,910)
Depreciation charge	(283,824)	(176,588)	(73,995)	(37,228)	(349,006)	(34,186)	(21,869)	–	(976,696)
Depreciation and impairment on disposals	23,604	20,352	12,224	4,076	53,785	1	6,284	419	120,745
Impairment, net of reversal of impairment *(Note 29)*	(3,940)	(8,279)	(15,278)	(618)	(28,203)	199	383	16,604	(39,132)
Reversal of provision under an onerous contract	–	–	–	–	–	–	–	1,125	1,125
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder	–	(24)	(11,608)	–	(33,561)	–	(451)	(35)	(45,679)
Transfers from/(to) intangible assets *(Note 7)*	(5,123)	–	(1)	–	(41)	–	(16)	(20,128)	(25,309)
Transfers from/(to) exploration and evaluation assets, investment property	16,674	–	2,314	–	89	1,033	(22)	–	20,088
Transfer from/(to) inventories, net	46	1,511	146	(4,383)	1,487	7,690	1,463	2,120	10,080
Other transfers and reclassifications	163,579	146,890	55,329	90,669	369,461	2,271	8,266	(836,465)	–
Net book value at December 31, 2021	4,497,010	1,969,154	1,149,430	1,209,907	3,503,068	174,789	194,451	1,566,249	14,264,058
Historical cost	6,536,027	3,781,994	1,817,250	1,516,829	6,319,236	385,966	387,546	1,661,461	22,406,309
Accumulated depreciation and impairment	(2,039,017)	(1,812,840)	(667,820)	(306,922)	(2,816,168)	(211,177)	(193,095)	(95,212)	(8,142,251)
Net book value at December 31, 2021	4,497,010	1,969,154	1,149,430	1,209,907	3,503,068	174,789	194,451	1,566,249	14,264,058

6. PROPERTY, PLANT AND EQUIPMENT (continued)

In millions of tenge	Oil and gas assets	Pipelines and refinery assets	Buildings and premises	Railway tracks and infra-structure	Machinery, equipment and vehicles	Mining assets	Other	Construc-tion in progress	Total
Including right-of-use assets under lease agreements									
Net book value at January 1, 2021	40,947	6,253	69,501	–	355,064	–	30,137	–	501,902
Foreign currency translation	**868**	**148**	**730**	**–**	**7,691**	**–**	**734**	**–**	**10,171**
Changes in estimates	**–**	**–**	**85**	**–**	**–**	**–**	**–**	**–**	**85**
Additions through lease agreements	**3,570**	**32,599**	**6,445**	**–**	**89,991**	**–**	**4,320**	**–**	**136,925**
Capitalized repair works	**–**	**–**	**–**	**–**	**8,788**	**–**	**–**	**–**	**8,788**
Lease modifications	**–**	**(625)**	**3,949**	**–**	**1,001**	**–**	**(3,532)**	**–**	**793**
Disposals	**(11,296)**	**(9)**	**(2,992)**	**–**	**(7,665)**	**–**	**(507)**	**–**	**(22,469)**
Depreciation charge	**(6,494)**	**(32,200)**	**(16,590)**	**–**	**(69,070)**	**–**	**(5,007)**	**–**	**(129,361)**
Depreciation and impairment on disposals	**–**	**9**	**995**	**–**	**6,944**	**–**	**380**	**–**	**8,328**
Transfer from property, plant and equipment	**–**	**–**	**–**	**–**	**483**	**–**	**–**	**–**	**483**
Other transfers and reclassifications	**–**	**–**	**(18)**	**–**	**–**	**–**	**18**	**–**	**–**
Net book value at December 31, 2021	**27,595**	**6,175**	**62,105**	**–**	**393,227**	**–**	**26,543**	**–**	**515,645**
Historical cost of right-of-use assets under lease agreements	**39,203**	**39,146**	**110,231**	**–**	**680,191**	**–**	**36,413**	**–**	**905,184**
Accumulated depreciation and impairment of right-of-use assets under lease agreements	**(11,608)**	**(32,971)**	**(48,126)**	**–**	**(286,964)**	**–**	**(9,870)**	**–**	**(389,539)**
Net book value at December 31, 2021	**27,595**	**6,175**	**62,105**	**–**	**393,227**	**–**	**26,543**	**–**	**515,645**

As at December 31, 2021 property, plant and equipment with net book value of 898,485 million tenge was pledged as collateral for some of the Group’s borrowings (December 31, 2020: 959,895 million tenge).

As at December 31, 2021 the cost of fully amortised property, plant and equipment of the Group was equal to 1,228,077 million tenge (December 31, 2020: 1,320,644 million tenge).

In 2021 the Group capitalized borrowing costs at an average interest rate of 6.14% in the amount of 48,624 million tenge *(Note 18)* (2020: at an average interest rate of 4.85% in the amount of 26,763 million tenge).

7. INTANGIBLE ASSETS

In millions of tenge	Licenses	Subsur-face use rights	Goodwill	Marketing related intangible assets	Software	Other	Total
Net book value at January 1, 2020	700,364	845,690	299,459	28,960	51,900	75,535	2,001,908
Foreign currency translation	48,907	19,429	1,002	2,776	363	835	73,312
Additions	5,156	100	–	–	17,702	3,808	26,766
Acquisition through business combinations	–	–	15,520	–	329	3,889	19,738
Disposals	(1,354)	–	–	–	(7,117)	(2,176)	(10,647)
Amortization charge	(44,591)	(33,681)	–	–	(19,224)	(5,633)	(103,129)
Accumulated amortization and impairment on disposals	1,343	–	–	–	6,334	130	7,807
(Impairment)/reversal of impairment, net *(Note 29)*	(222)	–	–	(6,911)	(1,158)	1,153	(7,138)
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder	–	–	–	–	(62)	–	(62)
Transfers from/(to) property, plant and equipment, net *(Note 6)*	124	609	–	–	11,455	1,201	13,389
Transfers from/(to) other non-current assets	–	–	–	–	80	–	80
Other transfers and reclassifications	1,318	–	–	–	3,328	(4,646)	–
Net book value at December 31, 2020	711,045	832,147	315,981	24,825	63,930	74,096	2,022,024
Foreign currency translation	**13,110**	**5,219**	**284**	**642**	**126**	**685**	**20,066**
Additions	**8,287**	**2,918**	**–**	**–**	**21,495**	**3,039**	**35,739**
Disposals	**(3,227)**	**–**	**–**	**–**	**(2,449)**	**(1,932)**	**(7,608)**
Amortization charge	**(43,399)**	**(39,215)**	**–**	**–**	**(20,858)**	**(3,354)**	**(106,826)**
Accumulated amortization and impairment on disposals	**3,196**	**–**	**–**	**–**	**2,285**	**1,930**	**7,411**
(Impairment)/reversal of impairment, net *(Note 29)*	**(566)**	**–**	**–**	**–**	**(3,602)**	**5**	**(4,163)**
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder	**–**	**–**	**–**	**–**	**26**	**–**	**26**
Transfers from/(to) property, plant and equipment, net *(Note 6)*	**508**	**5,123**	**–**	**–**	**8,267**	**11,411**	**25,309**
Transfers from/(to) exploration and evaluation assets *(Note 8)*	**–**	**9,665**	**–**	**–**	**–**	**–**	**9,665**
Transfers from/(to) other non-current assets	**2,158**	**–**	**–**	**–**	**231**	**–**	**2,389**
Other transfers and reclassifications	**1,045**	**–**	**–**	**–**	**5,014**	**(6,059)**	**–**
Net book value at December 31, 2021	**692,157**	**815,857**	**316,265**	**25,467**	**74,465**	**79,821**	**2,004,032**
Historical cost	**894,480**	**957,749**	**431,470**	**65,371**	**222,313**	**158,331**	**2,729,714**
Accumulated amortization and impairment	**(202,323)**	**(141,892)**	**(115,205)**	**(39,904)**	**(147,848)**	**(78,510)**	**(725,682)**
Net book value at December 31, 2021	**692,157**	**815,857**	**316,265**	**25,467**	**74,465**	**79,821**	**2,004,032**
Historical cost	869,540	933,938	432,947	63,722	189,762	148,180	2,638,089
Accumulated amortization and impairment	(158,495)	(101,791)	(116,966)	(38,897)	(125,832)	(74,084)	(616,065)
Net book value at December 31, 2020	711,045	832,147	315,981	24,825	63,930	74,096	2,022,024

8. EXPLORATION AND EVALUATION ASSETS

In millions of tenge	Tangible	Intangible	Total
Net book value at January 1, 2020	340,865	31,029	371,894
Foreign currency translation	16,935	–	16,935
Change in estimate	(845)	–	(845)
Additions	15,208	787	15,995
Impairment/write-off, net of reversal of impairment *(Note 29)*	(32,054)	(4,164)	(36,218)
Transfers from/(to) property, plant and equipment, net	(93)	–	(93)
Transfer from/(to) inventories, net	(274)	(1)	(275)
Net book value at December 31, 2020	339,742	27,651	367,393
Foreign currency translation	**4,822**	**–**	**4,822**
Change in estimate	**15**	**–**	**15**
Additions	**13,069**	**831**	**13,900**
Disposals	**(5,842)**	**(5,397)**	**(11,239)**
Impairment/write-off, net of reversal of impairment *(Note 29)*	**(76,869)**	**(2,214)**	**(79,083)**
Depreciation and impairment on disposals	**5,842**	**4,970**	**10,812**
Transfers from/(to) property, plant and equipment, net	**(17,707)**	**–**	**(17,707)**
Transfers from/(to) intangible assets *(Note 7)*	**–**	**(9,665)**	**(9,665)**
Transfer from/(to) inventories, net	**(299)**	**–**	**(299)**
Net book value at December 31, 2021	**262,773**	**16,176**	**278,949**
Historical cost	**284,201**	**19,381**	**303,582**
Accumulated impairment	**(21,428)**	**(3,205)**	**(24,633)**
Net book value at December 31, 2021	**262,773**	**16,176**	**278,949**
Historical cost	365,000	35,825	400,825
Accumulated impairment	(25,258)	(8,174)	(33,432)
Net book value at December 31, 2020	339,742	27,651	367,393

As at December 31, 2021 and 2020 the exploration and evaluation assets are represented by the following projects:

In millions of tenge	2021	2020
Kashagan	**191,463**	186,062
KazTransGas projects	**19,567**	17,366
Embamunaigas	**16,357**	33,458
Urikhtau	**13,726**	38,834
Zhambyl	**–**	59,603
Other	**37,836**	32,070
	278,949	367,393

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

As at December 31 investments in joint ventures and associates comprised the following:

In millions of tenge	Main activity	Place of business	2021 Carrying amount	2021 Percentage ownership	2020 Carrying amount	2020 Percentage ownership
Joint ventures						
Tengizchevroil LLP	Oil and gas exploration and production	Kazakhstan	**3,105,942**	**20.00%**	2,793,887	20.00%
Asia Gas Pipeline LLP	Construction and operation of the gas pipeline	Kazakhstan	**504,807**	**50.00%**	291,086	50.00%
Mangistau Investments B.V.	Oil and gas development and production	Kazakhstan	**207,410**	**50.00%**	142,585	50.00%
Beineu-Shymkent Pipeline LLP	Construction and operation of the gas pipeline	Kazakhstan	**200,338**	**50.00%**	156,771	50.00%
KazRosGas LLP	Processing and sale of natural gas and refined gas products	Kazakhstan	**54,317**	**50.00%**	76,702	50.00%
Forum Muider B.V.	Production and sale of coal	Kazakhstan	**53,747**	**50.00%**	42,437	50.00%
Ural Group Limited BVI	Oil and gas exploration and production	Kazakhstan	**41,453**	**50.00%**	44,585	50.00%
JV Kazgermunai LLP	Oil and gas exploration and production	Kazakhstan	**32,289**	**50.00%**	32,840	50.00%
Other			**175,289**		150,741	
Total joint ventures			**4,375,592**		3,731,634	
Associates						
Kazzinc LLP	Mining and processing of metal ores, production of refined metals	Kazakhstan	**548,879**	**29.82%**	531,591	29.82%
Caspian Pipeline Consortium JSC	Transportation of liquid hydrocarbons	Kazakhstan/Russia	**473,880**	**20.75%**	478,134	20.75%
JV KATCO LLP	Exploration, production, processing and export of uranium	Kazakhstan	**85,123**	**49.00%**	55,845	49.00%
PetroKazakhstan Inc. ("PKI")	Exploration, production and processing of oil and gas	Kazakhstan	**84,905**	**33.00%**	78,636	33.00%
Other			**112,855**		109,836	
Total associates			**1,305,642**		1,254,042	
			5,681,234		4,985,676	

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (continued)

The following tables illustrate summarized financial information of significant joint ventures, based on IFRS financial statements of these entities for 2021, reflecting equity method accounting adjustments:

In millions of tenge	Tengizchevroil LLP	Asia Gas Pipeline LLP	Mangistau Investments B.V.	Beineu-Shymkent Pipeline LLP	KazRosGas LLP	Forum Muider B.V.	Ural Group Limited BVI	JV Kazgermunai LLP
Joint ventures								
Non-current assets	21,900,722	1,266,161	480,741	588,673	45,961	165,165	254,152	65,184
Current assets, including	1,454,491	551,179	160,802	159,038	80,907	28,498	911	54,869
Cash and cash equivalents	331,602	394,184	101,431	26,064	31,428	6,907	830	49,531
Non-current liabilities, including	6,307,907	608,534	138,617	304,146	225	53,600	129,822	18,405
Non-current financial liabilities	3,886,200	404,571	–	282,759	–	48,235	95,775	–
Current liabilities, including	1,517,597	199,192	86,154	81,515	18,009	32,569	2,335	37,070
Current financial liabilities	60,529	173,173	–	64,738	–	1,803	–	–
Equity	15,529,709	1,009,614	416,772	362,050	108,634	107,494	122,906	64,578
Share of ownership	20.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Consolidation adjustments	–	–	(976)	19,313	–	–	(20,000)	–
Carrying amount of investment as at December 31, 2021	3,105,942	504,807	207,410	200,338	54,317	53,747	41,453	32,289
Revenue	6,793,158	857,998	763,148	200,362	196,978	103,081	–	118,071
Depreciation, depletion and amortization	(894,739)	(81,135)	(66,434)	(23,996)	(221)	(8,218)	(61)	(59,318)
Finance income	2,341	1,082	181	1,894	2,908	3,805	–	743
Finance costs	(62,409)	(35,232)	(9,296)	(14,916)	–	(798)	(3,918)	(1,752)
Income tax expenses	(946,429)	(128,361)	(55,667)	–	(12,467)	(6,838)	(171)	(27,785)
Profit/(loss) for the year	2,208,327	507,108	160,308	131,067	41,903	22,822	(22,120)	12,216
Other comprehensive income/(loss)	393,933	765	18	–	4,394	(57)	3,995	1,596
Total comprehensive income/(loss)	2,602,260	507,873	160,326	131,067	46,297	22,765	(18,125)	13,812
Dividends received	208,397	40,216	15,338	20,700	45,532	72	–	7,441

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (continued)

The following tables illustrate summarized financial information of significant joint ventures, based on IFRS financial statements of these entities for 2020, reflecting equity method accounting adjustments:

In millions of tenge	Tengizchevroil LLP	Asia Gas Pipeline LLP	Mangistau Investments B.V.	Beineu-Shymkent Pipeline LLP	KazRosGas LLP	Forum Muider B.V.	Ural Group Limited BVI	JV Kazgermunai LLP
Joint ventures								
Non-current assets	20,221,619	1,333,611	468,069	544,058	44,681	134,249	246,111	101,629
Current assets, including	908,846	616,479	89,172	147,802	118,142	34,903	993	24,627
Cash and cash equivalents	50,588	180,065	5,267	18,027	44,459	9,091	833	19,264
Non-current liabilities, including	6,412,967	886,362	160,711	351,719	207	57,775	115,216	35,090
Non-current financial liabilities	4,061,782	692,254	–	335,084	–	52,564	81,291	–
Current liabilities, including	748,064	481,556	110,186	76,155	9,212	26,503	2,718	25,486
Current financial liabilities	69,558	464,699	21,306	63,101	–	1,637	–	–
Equity	13,969,434	582,172	286,344	263,986	153,404	84,874	129,170	65,680
Share of ownership	20.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Consolidation adjustments	–	–	(587)	24,778	–	–	(20,000)	–
Carrying amount of investment as at December 31, 2020	2,793,887	291,086	142,585	156,771	76,702	42,437	44,585	32,840
Revenue	3,776,155	727,503	488,032	201,524	167,016	100,937	–	101,595
Depreciation, depletion and amortization	(700,929)	(78,212)	(75,609)	(18,222)	(289)	(7,323)	(14)	(27,084)
Finance income	3,887	7,352	239	–	2,293	500	–	511
Finance costs	(58,264)	(54,943)	(9,555)	(14,365)	–	(3,110)	(16,986)	(1,598)
Income tax expenses	(371,799)	(90,323)	(19,663)	–	(6,628)	(5,968)	(1,077)	(6,200)
Profit/(loss) for the year	867,380	350,677	33,498	110,010	7,785	23,109	(20,531)	31,245
Other comprehensive income/(loss)	1,216,017	2,964	(1,479)	–	16,232	(100)	11,671	4,337
Total comprehensive income/(loss)	2,083,397	353,641	32,019	110,010	24,017	23,009	(8,860)	35,582
Dividends received	–	53,821	32,291	–	15,155	3,006	–	10,372

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (continued)

The following tables illustrate summarized financial information of significant associates, based on IFRS financial statements of these entities for 2021 and 2020, reflecting equity method accounting adjustments:

	2021				2020			
In millions of tenge	**Kazzinc LLP**	**Caspian Pipeline Consortium JSC**	**JV KATCO LLP**	**Petro-Kazakhstan Inc. ("PKI")**	Kazzinc LLP	Caspian Pipeline Consortium JSC	JV KATCO LLP	Petro-Kazakhstan Inc. ("PKI")
Associates								
Non-current assets	**1,487,330**	**2,050,452**	**85,480**	**255,912**	1,732,663	2,082,957	73,426	284,545
Current assets	**848,662**	**229,939**	**125,413**	**88,537**	491,115	193,677	73,445	67,047
Non-current liabilities	**302,288**	**32,699**	**9,873**	**20,905**	300,729	32,817	8,768	72,335
Current liabilities	**193,195**	**163,712**	**10,192**	**45,717**	140,509	134,300	8,291	20,426
Equity	**1,840,509**	**2,083,980**	**190,828**	**277,827**	1,782,540	2,109,517	129,812	258,831
Share of ownership	**29.82%**	**20.75%**	**49.00%**	**33.00%**	29.82%	20.75%	49.00%	33.00%
Goodwill	**–**	**41,454**	**68**	**–**	–	40,409	68	–
Unrecognized gain on transactions with associates	**–**	**–**	**(8,451)**	**–**	–	–	(7,831)	–
Impairment of the investment	**–**	**–**	**–**	**(6,778)**	–	–	–	(6,778)
Carrying amount of investment	**548,879**	**473,880**	**85,123**	**84,905**	531,591	478,134	55,845	78,636
Revenue	**1,484,652**	**925,320**	**116,791**	**113,185**	1,243,589	872,851	93,923	83,863
Profit/(loss) for the year	**224,656**	**438,091**	**61,016**	**24,369**	252,431	393,165	52,267	(26,702)
Other comprehensive income	**–**	**60,033**	**–**	**3,149**	–	180,142	–	13,223
Total comprehensive income/(loss)	**224,656**	**498,124**	**61,016**	**27,518**	252,431	573,307	52,267	(13,479)
Other	**–**	**–**	**(620)**	**–**	–	–	(538)	–
Dividends received	**63,274**	**107,614**	**–**	**2,763**	53,442	–	30,870	2,609

All of the above joint ventures and associates are strategic for the Group's business.

9. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (continued)

The following tables illustrate aggregate financial information of individually insignificant joint ventures (the Group's proportional interest):

In millions of tenge	**2021**	2020
Carrying amount of investments as at December 31	**175,289**	150,741
Net profit for the year	**88,049**	4,760
Other comprehensive loss	**(297)**	(357)
Total comprehensive income/(loss)	**87,752**	4,403

The following tables illustrate aggregate financial information of individually insignificant associates (the Group's proportional interest):

In millions of tenge	**2021**	2020
Carrying amount of investments as at December 31	**112,855**	109,836
Net profit for the year	**49,535**	78,717
Other comprehensive income/(loss)	**569**	6,130
Total comprehensive income	**50,104**	84,847

In 2021 dividends received from individually insignificant joint ventures and associates were equal to 36,100 million tenge (2020: 44,598 million tenge).

The following table summarizes the movements in equity investments in joint ventures and associates in 2021 and 2020:

In millions of tenge	**2021**	2020
Balance as at January 1	**4,985,676**	4,242,871
Share in profit of joint ventures and associates, net *(Note 32)*	**1,142,082**	641,608
Dividends received	**(547,447)**	(246,164)
Change in dividends receivable	**(3,339)**	5,815
Adjustment of unrealized income*	**(6,294)**	2,936
Additional contributions without change in ownership	**1,926**	17,391
Acquisitions	**1,618**	213
Disposals	**(89)**	(22,273)
Transfers to assets classified as held for sale or distribution to the Shareholder	**–**	3,709
Foreign currency translation	**101,309**	349,926
Other comprehensive income, other than foreign currency translation	**2,213**	4,828
Impairment, net *(Note 29)*	**(5,921)**	(36,790)
Discount on loans issued	**8,495**	21,620
Financial guarantees issued	**672**	–
Other changes in equity of joint ventures and associates	**333**	(14)
Balance as at December 31	**5,681,234**	4,985,676

* *Adjustment of unrealized income represent unrealized income from sale of inventory from joint ventures to Group and capitalized borrowing costs on the loans provided by the Group to joint ventures.*

As at December 31, 2021, the Group's share in unrecognized losses of joint ventures and associates was equal to 15,581 million tenge (December 31, 2020: 20,514 million tenge).

10. LOANS ISSUED AND FINANCE LEASE RECEIVABLES

As at December 31, loans issued and finance lease receivables comprised the following:

In millions of tenge	**2021**	2020
Loans issued at amortized cost	**238,186**	225,812
Loans issued at fair value through profit or loss	**123,161**	138,024
Finance lease receivables	**62,003**	74,024
Total loans and finance lease receivables	**423,350**	437,860
Less: allowance for expected credit losses	**(19,234)**	(15,624)
Loans issued and finance lease receivables, net	**404,116**	422,236
Less: current portion	**(46,703)**	(55,406)
Non-current portion	**357,413**	366,830

Movements in the loan allowance for expected credit losses for the years ended December 31 were as follows:

In millions of tenge	**2021**	2020
Allowance at January 1	**15,624**	13,488
Charged, net *(Note 29)*	**1,046**	2,053
Disposal of subsidiary	**2,564**	–
Write-off, net	**–**	(16)
Foreign exchange difference, net	**–**	99
Allowance at December 31	**19,234**	15,624

As at December 31 the components of finance lease receivables are as follows:

In millions of tenge	**2021**	2020
Within one year	**13,781**	16,737
Later than one year, but not later than five years	**36,952**	41,466
After five years	**45,055**	58,838
Lease payments	**95,788**	117,041
Less: unearned finance income	**(33,785)**	(43,017)
Net investment in finance leases	**62,003**	74,024

In millions of tenge	**2021**	2020
Loans issued in US dollars	**308,483**	321,687
Loans issued and finance lease receivables in tenge	**94,525**	97,215
Loans issued in other foreign currencies	**1,108**	3,334
	404,116	422,236

11. AMOUNTS DUE FROM CREDIT INSTITUTIONS

As at December 31 amounts due from credit institutions comprised the following:

In millions of tenge	**2021**	2020
Bank deposits	**694,517**	370,845
Loans to credit institutions	**83,585**	122,217
Less: allowance for expected credit losses	**(1,440)**	(3,490)
Amounts due from credit institutions, net	**776,662**	489,572
Less: current portion	**(671,859)**	(354,257)
Non-current portion	**104,803**	135,315

11. AMOUNTS DUE FROM CREDIT INSTITUTIONS (continued)

In millions of tenge	**2021**	2020
Rating from A+(A1) to A-(A3)	**340,907**	124,409
Rating from BBB+(Baa1) to BBB(Baa2)	**103,874**	1,608
Rating from BBB-(Baa3) to BB-(Ba3)	**271,091**	284,997
Rating from B+(B1) to B-(B3)	**60,790**	78,558
	776,662	489,572

In millions of tenge	**2021**	**Weighted average interest rate**	2020	Weighted average interest rate
Amounts due from credit institutions, denominated in US dollars	**646,484**	**0.35%**	308,948	0.47%
Amounts due from credit institutions, denominated in tenge	**130,177**	**5.66%**	180,623	3.46%
Amounts due from credit institutions, denominated in other currencies	**1**	**4%**	1	0.70%
	776,662		489,572	

12. OTHER FINANCIAL ASSETS

As at December 31 other financial assets comprised the following:

In millions of tenge	**2021**	2020
Financial assets at fair value through other comprehensive income, including:	**21,935**	56,830
Bonds of Kazakhstani financial institutions	**11,662**	42,331
Treasury bills of the Ministry of Finance of the Republic of Kazakhstan	**8,615**	6,492
Treasury notes of foreign governments	**904**	1,810
Corporate bonds	**694**	6,135
Equity securities	**60**	62
Financial assets at amortized cost, including:	**1,016,884**	683,618
Bonds of Kazakhstani financial institutions	**343,307**	333,082
Corporate bonds	**114,685**	104,700
Notes of the National Bank of the Republic of Kazakhstan	**96,393**	62,295
Eurobonds of the Ministry of Finance of the Republic of Kazakhstan	**1,869**	1,834
Other financial assets at amortized cost, including:		
Reservation of cash for repayment of borrowings (Note 18)	***259,459***	–
Restricted cash	***183,044***	*170,135*
Other accounts receivable	***122,136***	*114,510*
Amounts due from employees	***10,447***	*12,441*
Dividends receivable	***6,685***	*3,427*
Other	***11,507***	*10,730*
Less: allowance for expected credit losses	**(132,648)**	(129,536)
Financial assets at fair value through profit or loss, including:	**135,908**	62,361
Equity securities	**106,197**	56,955
Guaranteed returns from a shareholder of a joint venture	**11,750**	–
Forward and futures contracts	**10,965**	97
Options	**3,188**	1,048
Corporate bonds	**2,993**	3,508
Bonds of Kazakhstani financial institutions	**815**	753
Total financial assets	**1,174,727**	802,809
Less: current portion	**(506,895)**	(188,427)
Non-current portion	**667,832**	614,382

12. OTHER FINANCIAL ASSETS (continued)

In June and November 2021, the Group made reservation of cash in total amount of 681 million US dollars (equivalent to 292,258 million tenge) for repayment of the loan from Eximbank, out of which 77 million US dollars (equivalent to 32,799 million tenge) *(Note 18)* was repaid in July 2021. As at December 31, 2021 balance of cash reservation for repayment of borrowings due to Eximbank equaled 604 million US dollars (equivalent to 259,459 million tenge), including accrued interest.

As at December 31 other financial assets by currency, except for derivatives, comprised:

In millions of tenge	**2021**	2020
Financial assets, denominated in tenge	**742,117**	618,107
Financial assets, denominated in US dollars	**387,042**	149,242
Financial assets, denominated in euro	**24,804**	29,363
Financial assets, denominated in rubles	**12**	14
Financial assets, denominated in other currency	**6,599**	4,938
	1,160,574	801,664

13. OTHER NON-CURRENT ASSETS

As at December 31 other non-current assets comprised the following:

In millions of tenge	**2021**	2020
Advances paid for non-current assets	**361,269**	217,889
Long-term VAT receivable	**180,022**	194,145
Long-term inventories	**54,655**	67,306
Prepaid expenses	**19,300**	10,521
Other	**21,598**	24,166
Less: impairment allowance	**(58,654)**	(66,120)
	578,190	447,907

14. INVENTORIES

As at December 31 inventories comprised the following:

In millions of tenge	**2021**	2020
Uranium products (at lower of cost and net realizable value)	**221,613**	183,360
Oil refined products for sale (at lower of cost and net realizable value)	**89,725**	56,712
Production materials and supplies (at lower of cost and net realizable value)	**65,354**	65,869
Crude oil (at cost)	**62,326**	34,151
Work in progress (at lower of cost and net realizable value)	**57,477**	45,104
Gas processed products (at cost)	**34,538**	32,841
Oil and gas industry materials and supplies (at cost)	**34,437**	38,196
Goods for resale (at lower of cost and net realizable value)	**34,193**	60,180
Fuel (at lower of cost and net realizable value)	**24,089**	20,489
Railway industry materials and supplies (at cost)	**17,300**	15,010
Aircraft spare parts (at cost)	**14,744**	13,308
Electric transmission equipment spare parts (at cost)	**5,499**	4,845
Uranium industry materials and supplies (at lower of cost and net realizable value)	**3,828**	1,841
Telecommunication equipment spare parts (at cost)	**2,069**	1,805
Other materials and supplies (at lower of cost and net realizable value)	**61,705**	52,652
	728,897	626,363

Uranium products and goods for resale as at December 31, 2021 and December 31, 2020 include inventory received under inventory loans in the amount of 8,597 million tenge, which corresponds to the estimated fair value of consideration transferred on the transaction date. A liability corresponding to the obligation to return inventory was recognised in the same amount in other liabilities *(Notes 23, 24)* and further revalued in accordance with the changes of market prices for inventory.

15. TRADE ACCOUNTS RECEIVABLE AND OTHER CURRENT ASSETS

As at December 31 trade accounts receivable comprised the following:

In millions of tenge	**2021**	2020
Trade accounts receivable	**1,074,650**	714,328
Less: allowance for expected credit losses	**(49,758)**	(47,221)
	1,024,892	667,107

As at December 31 other current assets comprised the following:

In millions of tenge	**2021**	2020
Advances paid and deferred expenses	**114,163**	89,778
Other prepaid taxes	**86,740**	84,595
Other non-financial current assets	**21,930**	24,798
Less: impairment allowance	**(12,847)**	(14,402)
	209,986	184,769

At December 31, 2021 the Group's receivables of 131,120 million tenge were pledged under certain Group borrowings (December 31, 2020: 156,111 million tenge).

Movements in the allowance for expected credit losses for trade accounts receivable for the years ended December 31 were as follows:

In millions of tenge	**2021**	2020
Allowance at January 1	**47,221**	46,076
Charged, net	**5,873**	10,213
Foreign exchange difference, net	**(594)**	3,596
Change in estimate	**(4)**	3
Transfers from/(to) assets classified as held for sale or distribution to the Shareholder, net	**(1,157)**	(32)
Write-off, net	**(1,581)**	(12,635)
Allowance at December 31	**49,758**	47,221

Movements in the impairment allowance for other current assets for the years ended December 31 were as follows:

In millions of tenge	**2021**	2020
Allowance at January 1	**14,402**	19,379
Charged, net	**1,379**	(3,071)
Foreign exchange difference, net	**3**	16
Change in estimate	**(29)**	(137)
Transfers to assets classified as held for sale or distribution to the Shareholder	**–**	(5)
Write-off, net	**(2,908)**	(1,780)
Allowance at December 31	**12,847**	14,402

16. CASH AND CASH EQUIVALENTS

As at December 31 cash and cash equivalents comprised the following:

In millions of tenge	**2021**	2020
Bank deposits − US dollars	**999,449**	740,940
Bank deposits − tenge	**661,752**	405,360
Bank deposits − other currency	**32,941**	55,743
Current accounts with banks − US dollars	**690,971**	701,048
Current accounts with banks − tenge	**221,834**	248,087
Current accounts with banks − other currency	**34,709**	44,149
Reverse repurchase agreements and other treasury securities with contractual maturity of three months or less	**141,035**	15,421
Balances on brokerage accounts payable on demand	**19,193**	–
Cash on hand	**7,403**	9,057
Cash in transit	**2,290**	8,185
Less: allowance for expected credit losses	**(847)**	(321)
	2,810,730	2,227,669

Within the framework of diversification, the Group continues to place part of its free liquidity in money market instruments, such as automatic repurchase agreements secured by government securities.

Short-term bank deposits are placed for varying periods of between 1 (one) day and 3 (three) months, depending on immediate cash needs of the Group. As at December 31, 2021 the weighted average interest rates for short-term bank deposits were 8.34% in tenge, 0.26% in US dollars, 5.07% in other currency; and current accounts were 0.7% in tenge, 0.26% in USD dollars, 0.46% in other currency, respectively (December 31, 2020: the weighted average interest rates for short-term bank deposits were 7.7% in tenge, 0.39% in US dollars, 1.13% in other currency; and current accounts were 0.1% in tenge, 0.07% in US dollars, 0.35% in other currency, respectively).

17. EQUITY

17.1 Share capital

During 2021 and 2020 the Fund issued common shares, which were paid as follows:

Payment for shares	**Number of shares authorized and issued**	**Par value per share, in tenge**	**Share capital in millions of tenge**
As of December 31, 2019	3,481,957,769		5,229,112
Cash contributions	764	34,075,462	26,000
Property contributions	1,875	21,848,312; 465,216	3,545
As of December 31, 2020	3,481,960,408		5,258,657
Cash contributions	**1,000**	**9,923,089**	**9,923**
As of December 31, 2021	**3,481,961,408**		**5,268,580**

As at December 31, 2021 3,481,961,408 shares of the Fund were fully paid (December 31, 2020: 3,481,960,408 shares).

Cash contributions

In August 2021, the Shareholder made cash contributions to the Fund's share capital of 9,923 million tenge. These amounts were aimed to finance the project " Construction of Infrastructure facilities on the territory of SEZ "National Industrial Petrochemical Technopark".

17.2 Dividends

Dividends attributable to equity holder of the Parent

On November 30, 2021, the Fund declared and paid dividends to the Shareholder of 88,337 million tenge based on financial results of 2020 in accordance with the Resolution of the Government dated November 21, 2021.

On August 26, 2020, the Fund declared and paid dividends to the Shareholder of 120,000 million tenge based on financial results of 2019 in accordance with the Resolution of the Government dated August 21, 2020.

17. EQUITY (continued)

17.2 Dividends (continued)

Dividends attributable to non-controlling interest

During 2021 the Group declared dividends of 92,511 million tenge to the holders of non-controlling interest in National Company “KazMunayGas” JSC (“NC KMG”) group, Kazakhtelecom JSC (“KTC”), National Atomic Company “Kazatomprom” JSC (“NAC KAP”) and Kazakhstan Electricity Grid Operating Company JSC (“KEGOC”). Total amount of dividends paid to the holders of non-controlling interest during 2021 equaled 92,076 million tenge.

17.3 Other transactions with the Shareholder

In September 2021, the Group represented by its subsidiaries Passenger Transportation JSC and Tulpar Wagon Building Plant LLP entered into a three-side purchase and finance lease arrangements with Industrial Development Fund JSC, which is under common control of Shareholder, for renewal of passenger waggon fleet for 13,125 million tenge. Interest is repaid annually at 1.5%. The principal amount is subject to repayment in annual instalments until it is fully repaid in 2041. The grace period on repayment of principal amount is 6 years.

The borrowings were obtained at the rates below market and the fair value of the borrowings was calculated based on market interest rate of 10.78%. The Group recognized the adjustment to fair value of 7,857 million tenge with the deferred tax effect of 1,571 million tenge as other transaction with the Shareholder *(Note 18)*.

17.4 Other distributions to the Shareholder

Social projects financing

During 2021 in accordance with the Shareholder’s resolution, the Group provided funding for procurement of vaccines against COVID-19 for the total amount of 13,410 million tenge and recognised the funding as other distributions to the Shareholder in the consolidated statement of changes in equity. As of December 31, 2021 these liabilities were fully paid off.

Also, during 2021 in accordance with Shareholder’s resolutions, the Fund recognised liabilities for financing of various social projects for the amount of 25,983 million tenge as other distributions to the Shareholder in the consolidated statement of changes in equity. As of December 31, 2021, the Group made repayment of liabilities of 29,878 million tenge.

Financing construction of social facilities

During 2021 in accordance with the Shareholder’s resolutions, the Fund recognized liabilities for financing of the construction of the Center of Kazakhstan Gymnastics Federation in Nur-Sultan city and the construction of the park for the family rest in Nur-Sultan city in the amount of 18,000 million tenge and 8,500 million tenge, respectively.

In 2020 in accordance with the Shareholder resolution, the Fund recognized liabilities for financing of the construction of social medical facilities of 50,004 million tenge as other distributions to the Shareholder in the consolidated statement of changes in equity. As of December 31, 2021, the Group made repayment of this liability of 23,750 million tenge.

17.5 Transfer of assets to the Shareholder

Transfer of 100% share in Financial Settlement Center of Renewable Energy LLP

In December 2021, in accordance with the Resolution of the Government of the Republic of Kazakhstan dated November 30, 2021, the Group transferred shares of Financial Settlement Center of Renewable Energy LLP to the State property and privatization committee of the Ministry of Finance of Republic of Kazakhstan with the net assets of 37,122 million tenge *(Note 5)*. This transaction was recognized as transfer of assets to the Shareholder in consolidated statement of changes in equity.

Transfer of shares of KOREM JSC

In April 2021, in accordance with the Resolution of the Government of the Republic of Kazakhstan dated March 17, 2021 the Group transferred shares of KOREM JSC to the State property and privatization committee of the Ministry of Finance of the Republic of Kazakhstan with net assets of 312 million tenge *(Note 5)*. This transaction was recognized as transfer of assets to the Shareholder in consolidated statement of changes in equity.

17. EQUITY (continued)

17.6 Discount on loans from the Government

During 2021, the Group made partial early repayment of bonds with the nominal amount of 558 million tenge purchased by the National Bank of Republic of Kazakhstan. Due to the early redemption of obligations, the Group recognized the decrease in discount on loans from the Government of 278 million tenge in consolidated statement of changes in equity *(Note 19)*.

17.7 Change in ownership interests of subsidiaries − disposal of interest that does not result in the loss of control

Disposal of 49% interest in PE Ortalyk LLP

The Group and China General Nuclear Power Group, CGNPC, agreed to build a plant for the production of fuel assemblies, Ulba-FA LLP located on the territory of Ulba Metallurgical Plant JSC. CGNPC guaranteed the purchase of Ulba-FA LLP products, and in return the Group agreed to sell a 49% interest in DP Ortalyk LLP to CGNPC or its affiliate.

In April 2021 the parties signed a sale and purchase agreement, where the selling price of a 49% stake in DP Ortalyk LLP was determined in the amount of 435 million US dollars (equivalent to 186,437 million tenge) based on a fair value assessment determined by an independent appraiser.

On July 22, 2021 the sale of the interest in DP Ortalyk LLP was completed after obtaining all state permits and fulfilling all the preliminary conditions of the sale and purchase agreement. The re-registration has been completed and CGNM UK Limited (a subsidiary of CGNPC) became the owner of a 49% interest in DP Ortalyk LLP. The Group retains a 51% ownership interest. The management of the Group has determined that the Group retains control over DP Ortalyk LLP, because the Group has significant rights to manage the enterprise's production activities and influence the profits from them *(Note 4)*.

In millions of tenge	
Selling price at the exchange rate as of April 22, 2021	**186,437**
Less: foreign exchange loss	(579)
Consideration received	**185,858**
Net assets of the subsidiary at the date of disposal of the interest	55,258
Non-controlling interest, 49%	**20,389**
Selling price at the exchange rate as of April 22, 2021	**186,437**
Less: non-controlling interest	(20,389)
Less: corporate income tax	(33,466)
Increase in equity attributable to equity holder of the Parent	**132,582**

Mutual cooperation between the Group and CGNM and its related entities involved (CGNM Group) is governed by commercial agreement that contains put and call options.

Call option grants the Group the right to demand CGNM Group to sell their interest in DP Ortalyk LLP and Ulba-FA LLP after occurrence of any of the following events: (1) there is a deadlock situation for a decision made by the Group and CGNM Group as participants of DP Ortalyk LLP and Ulba-FA LLP, (2) CGNM Group ceases to own its interest in Ulba-FA LLP, (3) CGNM Group submits a notice of liquidation, (4) CGNM Group causes a material breach of commercial terms of Ulba-FA LLP that has not been addressed, (5) Ulba-FA LLP does not complete any of its planned activities on the specified date because of unfulfilled liabilities by the CGNM Group, including shipment of fuel tablets within 24 months after the first order placed. CGNM Group has 60 days to eliminate an event occurred before the option is exercised. Call option is exercised at fair value of shares as of the date the notice of option exercise.

17. EQUITY (continued)

17.7 Change in ownership interests of subsidiaries − disposal of interest that does not result in the loss of control (continued)

Disposal of 49% interest in PE Ortalyk LLP (continued)

Put option grants the CGNM Group the right to demand the Group to buy their interest in DP Ortalyk LLP and Ulba-FA LLP after occurrence of any of the following events: (1) there is a deadlock situation for a decision made by the Group and CGNM Group as participants of DP Ortalyk LLP and Ulba-FA LLP, (2) CGNM Group ceases to own its interest in DP Ortalyk LLP, (3) the Group submits a notice of liquidation, (4) the Group causes a material breach of commercial terms of Ulba-FA LLP that has not been addressed, (5) Ulba-FA LLP does not complete any of its planned activities on the specified date because of unfulfilled liabilities by the Group, including shipment of fuel tablets within 24 months after the first order placed. The Group has 60 days to eliminate an event occurred before the option is exercised. Put option is exercised at fair value of shares as of the date the notice of option exercise. With respect of valuation of derivative instruments relating to above mentioned put and calls options the Group determined that such value is immaterial as the exercise price is set at the fair value of the shares.

The Group considered the impact of above mentioned call and put options on the financial statements, in particular the Group considered whether the existence of put option requires recognition of financial liabilities at the amount equal to net present value of the redemption amount pursuant to requirement of IAS 32. Consequently, as at the date of transaction and as at September 30, 2021 the Group has recognised a liability in the amount of 185,210 million tenge in accordance with the terms of the sale and purchase agreement of a 49% stake in DP Ortalyk LLP, which provides the right to CGNM to request the Group to buy back that entity's ownership interest in DP Ortalyk LLP at fair value on the date of purchase if DP Ortalyk LLP does not receive a new subsoil use contract on Zhalpak field by December 31, 2021, the Group assessed that obtaining that subsoil use contract was outside of control of the Group. The subsoil use contract was received on December 14, 2021 and then the liability was derecognised in correspondence with equity amount. There was no material change to its fair value between initial recognition date and extinguishment date.

As of December 31, 2021 the Group has not recognised financial liability to purchase shares in DP Ortalyk LLP as required by IAS 32 because management believes that other conditions requiring purchase of shares listed above are under the Group's control, i.e. the Group does not have unavoidable obligation to pay cash.

Disposal of 24% of shares of Kcell JSC

On September 30, 2021, the Group, represented by its subsidiary KTC, sold 24% of shares of Kcell JSC through open trading on Kazakhstan Stock Exchange (KASE). As a result of disposal of shares, the Group recognized proceeds of 55,280 million tenge, non-controlling interest increased by 14,885 million tenge, and the difference of 40,395 million tenge was recognized as an increase in retained earnings.

17.8 Non-controlling interest

The following tables illustrate information of subsidiaries in which there is significant non-controlling interests as at December 31:

	Non-controlling interest			
	2021		2020	
	Share	**Carrying amount**	Share	Carrying amount
NC KazMunayGas JSC	**9.58%**	**700,873**	9.58%	762,616
NAC Kazatomprom JSC	**25.00%**	**644,719**	25.00%	535,302
Kazakhtelecom JSC	**47.97%**	**344,297**	47.97%	267,297
KEGOC JSC	**10.00% − 1**	**27,251**	10.00% − 1	27,567
Air Astana JSC	**49.00%**	**13,536**	49.00%	3,796
Other		**186,783**		76,273
		1,917,459		1,672,851

All significant subsidiaries with non-controlling interest are registered in Kazakhstan.

17. EQUITY (continued)

17.8 Non-controlling interest (continued)

The following tables illustrate summarized financial information of subsidiaries, in which there are significant non-controlling interests as at December 31, 2021 and for the year then ended:

In millions of tenge	NC KazMunay-Gas JSC	Kazatomprom NAC JSC	Kazakhtelecom JSC	KEGOC JSC	Air Astana JSC
Summarized statement of financial position					
Non-current assets	10,545,725	1,179,748	927,854	439,045	330,035
Current assets	3,106,536	771,756	306,731	73,397	145,892
Non-current liabilities	4,121,296	255,581	403,493	194,250	290,765
Current liabilities	1,372,284	158,822	186,915	45,684	157,538
Total equity	8,158,681	1,537,101	644,177	272,508	27,624
Attributable to:					
Equity holder of the Parent	7,457,808	892,382	299,880	245,257	14,088
Non-controlling interest	700,873	644,719	344,297	27,251	13,536
Summarized statement of comprehensive income					
Revenue	6,546,903	691,011	581,495	186,443	321,139
Profit for the year	1,197,340	220,026	97,444	75,494	15,486
Other comprehensive income/(loss)	130,652	268	(6,304)	–	4,390
Total comprehensive income/(loss) for the year, net of tax	1,327,992	220,294	91,140	75,494	19,876
Attributable to:					
Equity holder of the Parent	1,344,408	141,043	84,456	75,494	19,876
Non-controlling interest	(16,416)	79,251	6,684	–	–
Dividends declared to non-controlling interest	(10,980)	(63,668)	(13,711)	(4,152)	–
Summarised cash flow information					
Operating activity	618,090	118,729	237,180	83,869	96,954
Investing activity	(528,287)	(71,241)	(90,106)	(62,321)	(5,294)
Financing activity	(282,533)	(1,843)	(26,591)	(31,346)	(80,399)
Net (decrease)/increase in cash and cash equivalents	(192,730)	45,645	120,483	(9,798)	11,261

17. EQUITY (continued)

17.8 Non-controlling interest (continued)

The following tables illustrate summarized financial information of subsidiaries, in which there are significant non-controlling interests as at December 31, 2020 and for the year then ended:

In millions of tenge	NC KazMunay-Gas JSC	Kazakhtelecom JSC	Kazatomprom NAC JSC	KEGOC JSC	Air Astana JSC
Summarized statement of financial position					
Non-current assets	12,176,863	929,390	1,146,991	411,590	316,346
Current assets	2,476,425	186,036	542,289	116,820	125,253
Non-current liabilities	4,683,232	427,409	237,915	183,055	283,029
Current liabilities	1,333,375	169,477	111,572	69,689	150,823
Total equity	8,636,681	518,540	1,339,793	275,666	7,747
Attributable to:					
Equity holder of the Parent	7,874,065	251,243	804,491	248,099	3,951
Non-controlling interest	762,616	267,297	535,302	27,567	3,796
Summarized statement of comprehensive income					
Revenue	4,556,037	520,917	587,457	350,660	157,224
Profit/(loss) for the year	171,896	65,308	221,368	68,531	(38,673)
Other comprehensive income	403,662	602	42	–	6,944
Total comprehensive income/(loss) for the year, net of tax	575,558	65,910	221,410	68,531	(31,729)
Attributable to:					
Equity holder of the Parent	677,743	64,140	183,580	68,531	(31,729)
Non-controlling interest	(102,185)	1,770	37,830	–	–
Dividends declared to non-controlling interest	(12,682)	(6,315)	(43,423)	(3,275)	–
Summarised cash flow information					
Operating activity	311,761	170,971	161,593	96,702	(11,236)
Investing activity	(70,841)	(119,485)	48,759	(65,795)	2,363
Financing activity	(245,226)	(32,109)	(201,415)	(30,690)	20,992
Net (decrease)/increase in cash and cash equivalents	(4,306)	19,377	8,937	217	12,119

17. EQUITY (continued)

17.9 Currency translation reserve

The currency translation reserve is used to record exchange differences arising from the translation of financial statements of the subsidiaries, whose functional currency is not tenge and whose financial statements are included in the consolidated financial statements. In 2021 foreign translation difference amounted to 245,256 million tenge (2020: 860,588 million tenge).

Certain borrowings of the Group denominated in US dollars were designated as hedge instrument for the net investment in the foreign operations. As at December 31, 2021 unrealized foreign currency loss of 93,367 million tenge resulting from translation of these borrowings were transferred to currency translation reserve recognized in other comprehensive income (2020: loss of 344,510 million tenge).

17.10 Hedge reserve

National Company "Kazakhstan Temir Zholy" JSC ("NC KTZh")

On August 7, 2015, the Group hedged cash flows to reduce the risk of changes in tenge equivalent revenue denominated in Swiss Francs. The principal from Eurobonds issued on June 20, 2014 on the Swiss stock exchange and maturing on June 20, 2022 is used as hedging instrument, which is separately identifiable and reliably estimated. A highly probable revenue stream forecast relating to transit transportation in Swiss Francs, in particular, first sales to be received in the period from January 1 to June 20, 2022, is the hedged item in this hedging relationship.

For the year ended December 31, 2021, the effective portion of 823 million tenge was recorded in the hedging reserve in other comprehensive income as net hedging instrument profit (2020: 15,220 million tenge as a net loss).

Air Astana JSC

In 2015 Air Astana entered into a cash flow hedge with finance lease obligations denominated in US dollars, to reduce the risk of changes in sales revenue expressed in US dollars. In connection with the transition of the functional currency to US dollar, this hedge ceased to be economically effective from December 31, 2017.

As a result of the change, the hedge relationship has been discontinued so that starting from January 1, 2018 no further foreign currency translation gains or losses are transferred from profit or loss to hedge reserve, and the hedge reserve recognized in equity as at December 31, 2021 shall remain in equity until the forecasted revenue cash flows are received.

During 2021 amount reclassified from the hedging reserve to foreign exchange loss from inception of the hedge was 5,010 million tenge before tax of 1,002 million tenge (2020: 4,819 million tenge before tax of 964 million tenge). Hedge income attributable to non-controlling interest comprised 2,455 million tenge (2020: 2,361 million tenge).

National Company "KazMunayGas" JSC ("NC KMG")

The Group buys crude oil from the market, refines it and later sells the finished products (e.g.: gasoline, diesel, jet fuel etc.). Throughout a given period, the volatility associated with the oil market, both in crudes and in finished products, is transmitted to the Group's refinery margin (difference between the purchase price of crude oil and the selling price of finished products). To reduce this volatility, the Group hedges the margin with a swap on a hedged basket as relevant for the period.

For the year ended December 31, 2021, the effective part of 10,055 million tenge was recorded in the cash flow hedging reserve through other comprehensive income as net fair value gain on cash flow hedging instruments (for the year ended December 31, 2020: 24 million tenge as net fair value loss on cash flow hedging instruments).

17.11 Other capital reserves

Other capital reserves include mainly remuneration of employees for the services rendered in the form of share-based payments with equity instruments of a subsidiary in which they are employed. The cost of equity-settled remunerations is recognized, together with a corresponding increase in other capital reserves, over the period in which performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award.

17. EQUITY (continued)

17.12 Book value per share

In accordance with the decision of the Exchange Board of Kazakhstan Stock Exchange JSC (“KASE”) dated October 4, 2010 financial statements shall disclose book value per share (common and preferred) as of the reporting date, calculated in accordance with the KASE rules.

In millions of tenge	**2021**	2020
Total assets	**30,309,758**	27,482,846
Less: intangible assets	**(2,004,032)**	(2,022,024)
Less: total liabilities	**(13,136,666)**	(12,331,231)
Net assets for common shares	**15,169,060**	13,129,591
Number of common shares as at December 31	**3,481,961,408**	3,481,960,408
Book value per common share, tenge	**4,356**	3,771
Earnings per share		
Weighted average number of common shares for basic and diluted earnings per share	**3,481,960,762**	3,481,958,351
Basic and diluted share in net profit for the period	**548.07**	167.30

18. BORROWINGS

As at December 31 borrowings, including interest payable, comprised the following:

In millions of tenge	**2021**	**Weighted average interest rate**	2020	Weighted average interest rate
Fixed interest rate borrowings	**6,599,170**		6,026,196	
Loans received	**1,804,252**	**13.41%**	1,529,212	13.41%
Debt securities issued	**4,794,918**	**8.56%**	4,496,984	8.45%
Floating interest rate borrowings	**1,263,522**		1,433,004	
Loans received	**1,159,936**	**10.79%**	1,330,210	8.22%
Debt securities issued	**103,586**	**9.79%**	102,794	8.42%
	7,862,692		7,459,200	
Less: amounts due for settlement within 12 months	**(954,209)**		(850,210)	
Amounts due for settlement after 12 months	**6,908,483**		6,608,990	
	7,862,692		7,459,200	

In millions of tenge	**2021**	2020
US dollar-denominated borrowings	**5,037,496**	4,908,083
Tenge-denominated borrowings	**1,896,980**	1,893,815
Other currency-denominated borrowings	**928,216**	657,302
	7,862,692	7,459,200

18. BORROWINGS (continued)

As at December 31, the bonds comprised:

In millions of tenge	**Issuance amount**	**Redemption date**	**Interest**	**December 31, 2021**	December 31, 2020
Bonds					
Bonds LSE 2018	1.5 billion USD	2048	6.375%	**639,046**	631,832
Bonds LSE 2018	1.25 billion USD	2030	5.375%	**540,156**	530,776
Bonds LSE 2017	1.25 billion USD	2047	5.75%	**522,827**	516,505
Bonds LSE 2017	1 billion USD	2027	4.75%	**428,552**	419,390
Bonds LSE 2014	1,100 million USD	2042	6.95%	**396,207**	386,652
Bonds LSE 2020	750 million USD	2033	3.50%	**325,735**	317,474
Bonds KASE 2019	0.3 billion KZT	2034	11.50%	**308,433**	308,433
Bonds ISE 2017	750 million USD	2027	4.375%	**307,808**	299,934
Bonds LSE 2018	500 million USD	2025	4.75%	**216,760**	212,117
Bonds LSE 2021	500 million USD	2026	2%	**213,291**	–
Bonds KASE 2020	129 billion tenge	2023	10.90%	**100,041**	100,041
Bonds SIX Swiss Exchange 2014	185 million Swiss Francs	2022	3.64%	**89,208**	90,036
Bonds MOEX 2017	15 billion Russian roubles	2022	8.75%	**86,832**	84,563
Bonds KASE 2019	80 billion KZT	2026	11.86%	**80,226**	80,208
Bonds SIX Swiss Exchange 2018	170 million Swiss Francs	2023	3.25%	**79,713**	80,016
Bonds AIX 2018	100 billion KZT	2024	11.84%	**77,875**	77,875
Bonds KASE 2018	75 billion KZT	2024	9.25%	**76,831**	76,831
Bonds KASE 2016	50 billion KZT	2026	Inflation rate + 2.52%	**53,376**	52,763
Other	–	–		**355,587**	334,332
Total				**4,898,504**	4,599,778

Debt securities issued

In October 2021 the Group issued Eurobonds for the total amount of 500 million US dollars on London Stock Exchange (LSE) (equivalent to 211,271 million tenge at the exchange rate as of date of transaction) with an annual coupon rate of 2% and maturity in 2026.

Loans received

In 2021 the Group received a long-term loan from VTB Bank (PJSC) for 38,169 million Russian roubles (equivalent to 229,015 million tenge) at the rate of key rate of Central Bank of Russia + 2.25% per annum and maturity of 6 years for the full early repayment of the loan due to Eximbank in 2022.

During 2021, the Group received borrowed funds in the amount of 529 million US dollars (equivalent to 224,731 million tenge) under an open credit line with the State Development Bank of China with interest rate of 5.8% per annum and maturity until 2037. The principal will be repaid starting from 2022. Interest is paid in semi-annual installments.

In December 2021, the Group, to repay a loan from Moscow Credit Bank, within the framework of the credit agreement with Bank VTB PJSC, borrowed 19,400 million Russian Roubles (equivalent to 112,714 million tenge). Loan interest is repaid quarterly at the "key rate of the Russian Central Bank + 2.75%". Principal is due to be repaid in a lump sum in December 2024.

In 2021 the Group partially repaid 105 million US dollars (equivalent to 44,734 million tenge) including accrued interest, and received a short-term loan from Halyk bank under revolving credit facility of 100 million US dollars (equivalent to 42,813 million tenge) with 5% interest rate for full early repayment of the loan from Eximbank in 2022 and to finance working capital.

In 2021 the Group received a long-term loan from Halyk bank in the total amount of 109,855 million tenge with 11% interest rate and maturity of 4 years to refinance its existing loans from Japan Bank for International Cooperation (JBIC) and Development bank of Kazakhstan JSC (DBK). The loan from Halyk bank was partially repaid for 22,827 million tenge, including accrued interest.

18. BORROWINGS (continued)

Loans received (continued)

During 2021 the Group made partial repayment of the loan from Eximbank for 79 million US dollars (equivalent to 33,039 million tenge), including accrued interest. Moreover, in June and November 2021, the Group made reservation of cash in total amount of 681 million US dollars (equivalent to 292,258 million tenge) for repayment of the loan from Eximbank, out of which 77 million US dollars (equivalent to 32,799 million tenge as at the payment date) was repaid in July 2021 and 604 million US dollars (equivalent to 259,459 million tenge as at the reporting date), including accrued interest, was repaid in January 2022 *(Note 12)*.

In 2021 the Group made full early repayment of the loan from JBIC for 155 million US dollars (equivalent to 67,392 million tenge), including accrued interest.

In 2021 the Group made full and partial repayment of the loans from DBK for 142 million US dollars (equivalent to 59,507 million tenge), including accrued interest, and 29,409 million tenge, including accrued interest.

In April 2021, the Group repaid the principal debt on a loan agreement with a syndicate of international and Kazakhstan banks − Bank of Tokyo Mitsubishi UFJ, Mizuho Bank, Ltd, Sumitomo Mitsui Banking Corporation, Halyk Bank of Kazakhstan JSC, Commercial and Industrial Bank of China JSC in Almaty and Citibank, N.A., Jersey Branch with Tokyo-Mitshubishi UFJ Bank, LTD in the the amount of 150 million US dollars (equivalent to 64,360 million tenge at the exchange rate at the payment date) according to the loan repayment schedule. The loan’s matury was up to October 30, 2022 with a grace period until April 30, 2021 at an annual interest rate of 1.4% + 3-month Libor. In October 2021 the Group early repaid the principal of 450 million US dollars (equivalent to 192,407 million tenge at the exchange rate at the payment date).

In 2021 the Group made partial repayment of its syndicated loan for 97 million US dollars (equivalent to 41,447 million tenge).

During 2021, the Group received tranches of 74,188 million tenge from Halyk Bank, including 51,088 million tenge for financing capital projects and 23,100 million tenge for replenishment of working capital. During 2021, the Group repaid loans from Halyk Bank in the amount of 28,090 million tenge.

Loans with an interest rate below the market

In 2021, the Group, entered into trilateral purchase and finance lease agreements with Industrial Development Fund JSC, which is under the common control of Shareholder, to renew its passenger carriage fleet. The Group accounts for the financial liabilities under the above agreements as borrowings *(Note 4)*. The Group recognised the adjustment to fair value at 7,857 million tenge net of the deferred tax effect of 1,571 million tenge through equity in retained earnings as other transactions with the Shareholder *(Notes 17, 33)*.

Covenants

Under the terms of some loan agreements, respective subsidiaries of the Group are obliged to comply with certain covenants. The Group reviews compliance with all the Group loan covenants at each reporting date.

Loan received from Bank VTB PJSC

Within the framework of the credit agreement with Bank VTB PJSC, which stipulates compliance with specific financial covenants, such as net debt to EBITDA, interest coverage ratios and coverage ratios (including (a) ratio of total debtors’ EBITDA to the Group EBITDA; (b) ratio of total debtors’ revenue to the “Kazakhstan Temir Zholy” JSC (“KTZ”) Group revenue; (c) the ratio of the total carrying amount of debtors` assets to the carrying amount of the KTZ Group assets) calculated on the basis of consolidated KTZ Group data, starting from December 31, 2021 and quarterly thereafter. As at December 31, 2021, these financial covenants had been met. At the same time, on December 30, 2021, the Group received a waiver from Bank VTB PJSC waiving the right to consider as a breach the non-compliance with cross-default and insolvency terms of the loan agreement, if the value of the assets of any Group entity is less than its liabilities (taking into account contingent and prospective liabilities).

18. BORROWINGS (continued)

Covenants (continued)

Loans received from Eurasian Development Bank

On October 31, 2011 the Group, represented by its subsidiary SSAP LLP, obtained a credit line in Eurasian Development Bank (EDB) in the amount of 8,820 million tenge maturing in 2024 and an interest rate of 10.5%, which corresponded to the market interest rate for similar loans.

The loan was obtained as part of reconstruction of the sulphuric acid plant and is due for settlement in accordance with the established schedule starting from March 1, 2016. Interest is due for settlement starting from March 1, 2014.

As part of the credit agreement with EDB, the SSAP LLP undertakes to ensure payment on the debt-service ratio of at least 1.2 and the ratio of Debt / EBITDA not exceeding 3.5.

Based on the results of 2020, the Group calculated these ratios, where the Debt / EBITDA ratio was 4.58. Debt service ratio is calculated based on the free cash flow divided by the amount of debt payments. As at December 31, 2020 the debt service ratio was 0.72, which meant a breach of obligations under the contract.

Due to the fact that the Group did not receive a waiver from the bank before December 31, 2020 the long term portion of loans of 2,086 million tenge was reclassified to current liabilities.

On October 29, 2021, a letter was received from the EDB on the decision to exclude the execution of financial indicators. Accordingly, as at December 31, 2021, the long term portion of loan of 1,505 million tenge was reclassified to non-current liabilities.

On December 30, 2016 the Group, represented by its subsidiary JV Alaigyr LLP, received a credit line for a period of 7 years from the EDB in the amount of 56 million US dollars for the construction of a mining and processing plant with interest repayment every six months and repayment of the principal amount of the loan at the maturity of loan agreement.

In accordance with the signed agreement, JV Alaigyr LLP must comply with the loan requirements for compliance with certain financial and non-financial covenants. As at December 31, 2021 and 2020, JV Alaigyr LLP did not comply with these covenants. The Group notified in 2020 about the non-fulfillment of the covenants and received a waiver letter from compliance with these covenants as at December 31, 2021 and 2020 and not to send the Group a claim for call of loan. The EDB resumed issuing new tranches on the credit line.

As of December 31, 2021 the Group complied with all financial and non-financial covenants under other loan agreements.

As at December 31 the carrying amount of borrowings of the Fund and the Group subsidiaries is presented below:

In millions of tenge	**2021**	2020
NC KMG and its subsidiaries	**3,700,776**	4,017,810
NC KTZh and its subsidiaries	**1,448,443**	1,444,085
UCC and its subsidiaries	**764,879**	516,888
The Fund	**578,552**	553,217
KazTransGas and its subsidiaries	**484,709**	–
Kazakhtelecom and its subsidiaries	**237,916**	284,527
Samruk-Energy and its subsidiaries	**223,755**	196,075
KEGOC and its subsidiaries	**171,199**	161,034
EGRES-2	**99,678**	100,611
NAC KAP and its subsidiaries	**89,017**	97,827
Air Astana	**26,895**	69,035
Other subsidiaries of the Fund	**36,873**	18,091
Total borrowings	**7,862,692**	7,459,200

18. BORROWINGS (continued)

Covenants (continued)

Loans received from Eurasian Development Bank (continued)

Changes in borrowings are as follows:

In millions of tenge	**2021***	2020*
Balance as at January 1	**7,459,200**	6,841,393
Received by cash	**1,462,347**	1,849,611
Interest accrued	**448,533**	439,898
Discount	**(8,486)**	(32,060)
Interest capitalized *(Note 6)*	**48,624**	26,763
Interest paid	**(505,303)**	(471,638)
Repayment of principal	**(1,170,506)**	(1,720,862)
Purchase of property plant and equipment financed by borrowings	**27,705**	5,729
Amortization of discount	**18,320**	22,551
Write-off of borrowings	**–**	(653)
Finance costs for the early redemption of bonds *(Note 30)*	**–**	45,278
Bonds early extinguishment premium and fees paid	**–**	(45,278)
Repayment of principal and interest by reserved cash	**(32,799)**	–
Foreign currency translation	**120,106**	493,124
Other	**(5,049)**	5,344
Balance as at December 31	**7,862,692**	7,459,200

* *Cash proceeds and repayments of certain borrowings obtained by the Fund's Corporate Center are included within cash flows from operating activities because these borrowings are part of the Fund's main activity of assets management. These borrowings were not included within changes in financial liabilities.*

19. LOANS FROM THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN

As at December 31 loans from the Government of the Republic of Kazakhstan comprised the following:

In millions of tenge	**Redemption date**	**Interest rate**	**2021**	2020
Bonds acquired by the National Bank of the Republic of Kazakhstan using the assets of the National Fund	2035-2063	0.01%-3%	**558,982**	541,754
Loans from the Government of the Republic of Kazakhstan	2022-2046	0.15%-0.4%	**20,387**	51,468
			579,369	593,222
Less: amounts due for settlement within 12 months			**(10,264)**	(30,773)
Amounts due for settlement after 12 months			**569,105**	562,449

Bonds acquired by the National Bank of the Republic of Kazakhstan

In accordance with the Rules on proceeds to the National Fund of the Republic of Kazakhstan from transfer of assets of national managing holdings, national holdings, national companies and their subsidiaries, affiliates and other legal entities affiliated with them to the competitive environment approved by the Resolution of the Government of the Republic of Kazakhstan No. 323 dated June 4, 2018, funds received from sale of national assets can be used for redemption of Fund's liabilities due to the National Fund.

In this regard, in 2021, in accordance with the adopted corporate decisions of the Fund, a partial early repayment of bonds at par value in the amount of 558 million tenge was carried out within the eleventh issue of the Fund's bonds purchased by the National Bank of the Republic of Kazakhstan. In this regard, the Fund recognized amortization of the discount on loans from the Government of the Republic of Kazakhstan in the amount of 278 million tenge in a consolidated statement of changes in equity *(Note 17)*.

20. PREPAYMENT ON OIL SUPPLY AGREEMENT

In 2018, the KMG Kashagan B.V. signed the second supplementary agreement to the crude oil supply agreement entered into in 2016. Under the terms of the supplementary agreement, the term of oil supplies was extended until December 2025, accordingly the minimum volume of oil from the Kashagan field was increased, and for the period from 2018 to 2025 amounts to 16.6 million tons.

The Agreement stipulates price determination on the basis of current market quotations and prepayment is reimbursed by means of physical supply of crude oil.

In accordance with the terms of the agreement, supply of oil started from January 2017. The KMG Kashagan B.V. considers this agreement as a contract, which was signed for the purpose of delivery of non-financial items in accordance with the Company's expectations and sale requirements.

During 2021, the KMG Kashagan B.V. delivered crude oil for the amount of 1,424 million US dollars (equivalent to 606,526 million tenge) with total volume of 2,653 thousand tons, therefore, according to the delivery schedule the remaining supply volume equaled 8,600 thousand tons as at December 31, 2021. The remaining volume will be supplied under the crude oil supply agreement.

The total amount of accrued remuneration for 2021 was 3,885 million tenge (2020: 13,735 million tenge) *(Note 30)*. Payment of remuneration shall be made in kind with crude oil.

As at December 31, 2021, the KMG Kashagan B.V. fully reimbursed by the prepayment outstanding under the crude oil supply agreement (as at December 31, 2020: 283,562 million tenge).

In accordance with the terms of agreement, KMG Kashagan B.V. must ensure the supplied volume of crude oil is unencumbered.

Prepayment on oil supply agreement is recognized as a contract liability to customers in accordance with IFRS 15.

21. LEASE LIABILITIES

The Group has leases for various items of property, plant and equipment, mainly aircraft.

From 2012 to 2014, Air Astana JSC ("Air Astana"), a subsidiary of the Group, acquired 10 (ten) aircraft on a fixed-rate lease basis with a transfer of ownership at the end of the lease term. The lease term for each aircraft is 12 (twelve) years. Air Astana has the option of purchasing each aircraft at a nominal price at the end of the lease term. Most aircraft leases are for eight years with no option to purchase at the end of the lease term.

Loans provided by financial institutions to the lessor in respect of 5 (five) new Airbus were guaranteed by European Export Credit Agencies, 3 (three) Boeing 767 aircraft were guaranteed by US Export Import Bank.

Air Astana pledged the leased assets with carrying amount of 279,848 million tenge to secure lease liabilities (December 31, 2020: 266,484 million tenge).

The Group's leases are subject to certain covenants. These covenants impose restrictions in respect of certain transactions, including, but not limited to restrictions in respect of indebtedness. These requirements have been met during 2021 and 2020.

As at December 31, 2021 interest calculation was based on effective interest rates ranging from 4.01% to 15.62% (December 31, 2020: from 4.01% to 14.5%).

As at December 31 future minimum lease payments under leases together with the present value of the net minimum lease payments comprised the following:

	Minimum lease payments		**Present value of minimum lease payments**	
In millions of tenge	**2021**	2020	**2021**	2020
Within one year	**153,253**	139,234	**129,676**	118,878
Two to five years inclusive	**352,881**	343,809	**275,509**	288,224
After five years	**178,637**	138,253	**104,476**	108,217
	684,771	621,296	**509,661**	515,319
Less: amounts representing finance costs	**(175,110)**	(105,977)	**–**	–
Present value of minimum lease payments	**509,661**	515,319	**509,661**	515,319
Less: amounts due for settlement within 12 months			**(129,676)**	(118,878)
Amounts due for settlement after 12 months			**379,985**	396,441

The Air Astana lease obligations are denominated in US dollars.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

21. LEASE LIABILITIES (continued)

Changes in lease liabilities are as follows:

In millions of tenge	**2021**	2020
Balance as at January 1	**515,319**	426,856
Interest paid	**(33,999)**	(27,320)
Repayment of principal	**(121,314)**	(95,262)
Interest accrued	**37,903**	33,835
Business combination	**–**	1,037
Foreign currency translation	**7,853**	35,711
Additions of leases	**119,229**	152,415
Lease agreement termination	**(12,588)**	(14,895)
Other	**(2,742)**	2,942
Balance as at December 31	**509,661**	515,319

22. PROVISIONS

As at December 31 provisions comprised the following:

In millions of tenge	Asset retirement obligations	Provision for environ-mental remediation	Provision for taxes	Provision for construction of social objects	Other	Total
Provision at January 1, 2020	260,648	64,341	18,184	4,904	122,153	470,230
Foreign currency translation	8,705	3,704	(1)	–	12,747	25,155
Transfer to liabilities associated with assets classified as held for sale	(24)	–	–	–	–	(24)
Change in estimate	19,746	(1,877)	–	–	1,975	19,844
Unwinding of discount	17,138	2,526	–	–	154	19,818
Provision for the year	1,815	5,454	722	–	19,035	27,026
Use of provision	(739)	(5,426)	(7,019)	–	(72,421)	(85,605)
Reversal of unused amounts	(1,189)	(43)	(1,451)	(1,032)	(4,828)	(8,543)
Provision at December 31, 2020	306,100	68,679	10,435	3,872	78,815	467,901
Foreign currency translation	**3,082**	**1,087**	**118**	**–**	**2,134**	**6,421**
Change in estimate	**20,317**	**(4,494)**	**–**	**–**	**(554)**	**15,269**
Unwinding of discount	**17,728**	**4,021**	**–**	**–**	**180**	**21,929**
Provision for the year	**1,041**	**5,678**	**5,138**	**–**	**35,143**	**47,000**
Use of provision	**(519)**	**(6,776)**	**(1,834)**	**(869)**	**(15,682)**	**(25,680)**
Reversal of unused amounts	**(1,329)**	**(1)**	**(748)**	**–**	**(1,908)**	**(3,986)**
Other changes	**–**	**–**	**4,618**	**–**	**9,270**	**13,888**
Provision at December 31, 2021	**346,420**	**68,194**	**17,727**	**3,003**	**107,398**	**542,742**

Current portion and non-current portion of provisions are presented as follows:

In millions of tenge	Asset retirement obligations	Provision for environ-mental remediation	Provision for taxes	Provision for construction of social objects	Other	Total
Current portion	2,030	8,190	10,435	3,872	56,453	80,980
Non-current portion	304,070	60,489	–	–	22,362	386,921
Provision at December 31, 2020	306,100	68,679	10,435	3,872	78,815	467,901
Current portion	**4,844**	**7,683**	**17,727**	**3,003**	**67,091**	**100,348**
Non-current portion	**341,576**	**60,511**	**–**	**–**	**40,307**	**442,394**
Provision at December 31, 2021	**346,420**	**68,194**	**17,727**	**3,003**	**107,398**	**542,742**

Other provisions as at December 31, 2021 included provisions for aircraft maintenance for the amount of 54,910 million tenge (December 31, 2020: 34,965 million tenge), and gas transportation provision of 31,562 million tenge (December 31, 2020: 30,766 million tenge).

23. OTHER NON-CURRENT LIABILITIES

As at December 31 other current liabilities comprised the following:

In millions of tenge	**2021**	2020
Other financial liabilities		
Obligations under guarantee agreements	**36,527**	47,200
Accounts payable	**11,139**	21,536
Historical costs associated with obtaining subsoil use rights	**10,891**	11,922
Other	**16,016**	17,355
Other non-financial liabilities		
Contract liabilities to customers	**52,404**	6,937
Advances received and deferred income	**27,872**	27,055
Government grant liability	**14,596**	29
Liabilities under inventory loan agreements *(Note 14)*	**13,461**	–
Other	**4,937**	6,051
	187,843	138,085

In 2020 the Group obtained finished goods under commodity loans totalling 21.9 million US dollars. A liability was initially recognised to return inventory at a cost of 8,597 million tenge. This liability is subsequently remeasured in accordance with changes in market prices for these goods. In the current period, additional agreements were concluded to extend the maturity of these commodity loans until May-June 2023, as a result of which the commodity loans were reclassified to noncurrent liabilities at December 31, 2021.

24. TRADE AND OTHER PAYABLES, AND OTHER CURRENT LIABILITIES

As at December 31 trade accounts payable comprised the following:

In millions of tenge	**2021**	2020
Trade accounts payable	**937,027**	731,348
Accounts payable for the supply of property, plant and equipment	**164,985**	82,722
Other accounts payable	**16,043**	14,188
	1,118,055	828,258

As at December 31, trade accounts payable were expressed in the following currencies:

In millions of tenge	**2021**	2020
Tenge-denominated trade accounts payable	**441,996**	413,111
US dollar-denominated trade accounts payable	**394,706**	239,608
Other currency-denominated trade accounts payable	**100,325**	78,629
	937,027	731,348

24. TRADE AND OTHER PAYABLES, AND OTHER CURRENT LIABILITIES (continued)

As at December 31 other current liabilities comprised the following:

In millions of tenge	**2021**	2020
Other financial liabilities		
Obligations to the Shareholder on the financing of social projects	**52,755**	54,027
Amounts due to customers	**39,980**	40,364
Due to employees	**32,139**	35,181
Payable under repo transactions	**11,464**	2,851
Obligations under guarantee agreements	**3,929**	6,174
Historical costs associated with obtaining subsoil use rights	**2,680**	2,856
Dividends payable	**814**	477
Other	**25,800**	24,738
Other non-financial liabilities		
Contract liabilities to customers	**297,865**	228,774
Other taxes payable	**188,831**	179,929
Vacation and other employee benefits allowance	**105,774**	87,479
Pension and social contributions liabilities	**21,834**	16,750
Amounts due under uranium swap contracts	**15,355**	11,588
Advances received and deferred income	**14,523**	11,971
Joint operations liabilities	**4,569**	–
Government grant liability	**4,246**	197
Liabilities under inventory loan agreements	**99**	10,522
Other	**22,828**	38,153
	845,485	752,031

Joint operations liabilities represent obligations of the Group under the terms of the joint operations contractual agreements that require equal volumes of uranium to be purchased during the period by the participants. In 2021 the Group did not purchase the required volume.

During 2021, the Group entered into direct repurchase agreements with counterparties on KASE. These agreements relate to treasury bills of the Ministry of Finance of the Republic of Kazakhstan and notes of the National Bank of the Republic of Kazakhstan with a carrying value of 11,464 million tenge as at December 31, 2021 (as at December 31, 2020: 2,851 million tenge).

25. REVENUE

Revenue comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Sales of crude oil	**3,709,616**	1,971,894
Sales of oil refined products	**2,651,786**	1,844,148
Railway cargo transportation	**1,191,187**	1,075,719
Sales of gas products	**762,571**	810,280
Sales of refined gold	**718,828**	637,758
Sales of uranium products	**666,944**	563,266
Telecommunication services	**579,528**	519,687
Electricity complex	**344,980**	262,969
Air transportation	**331,840**	162,962
Oil and gas transportation fee	**323,103**	289,858
Electricity transmission services	**314,056**	286,804
Oil processing fees	**202,527**	192,482
Railway passenger transportation	**58,636**	39,397
Interest income	**54,731**	40,137
Postal services	**43,198**	41,765
Less: Crude oil Quality Bank	**(5,950)**	(2,283)
Less: indirect taxes and commercial discounts	**(625,199)**	(538,286)
Other revenue	**387,276**	357,452
	11,709,658	8,556,009

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

25. REVENUE (continued)

In millions of tenge	**2021**	2020
Geographical markets		
Kazakhstan	**4,747,372**	4,041,217
Other countries	**6,962,286**	4,514,792
	11,709,658	8,556,009

26. COST OF SALES

Cost of sales comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Materials and supplies	**5,010,551**	3,225,362
Personnel costs, including social taxes and withdrawals	**1,008,765**	910,830
Depreciation, depletion and amortization	**1,000,869**	940,167
Fuel and energy	**447,310**	362,935
Repair and maintenance	**287,066**	254,890
Production services rendered	**264,925**	241,946
Mineral extraction tax	**145,116**	86,858
Taxes other than social taxes and withdrawals	**117,540**	103,853
Transportation expenses	**117,206**	58,662
Interest expense	**58,337**	62,544
Communication services	**49,183**	49,140
Rent	**40,954**	46,152
Security services	**25,293**	21,351
Other	**220,942**	254,031
	8,794,057	6,618,721

27. GENERAL AND ADMINISTRATIVE EXPENSES

General and administrative expenses comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Personnel costs, including social taxes and withdrawals	**215,732**	204,885
Depreciation and amortization	**44,133**	36,172
Audit and consulting services	**32,874**	34,755
Taxes other than social taxes and withdrawals	**29,710**	31,399
Other services by third parties	**18,826**	5,254
Sponsorship and charitable donations	**9,216**	10,596
Repair and maintenance	**8,558**	7,882
Allowance for expected credit losses for trade receivable and other assets	**6,985**	6,983
Rent	**4,682**	4,600
Business trips	**4,213**	2,576
Utilities expenses and maintenance of buildings	**3,765**	3,677
Communication services	**2,847**	2,384
Professional education and advanced trainings	**2,358**	1,526
Fines and penalties	**2,351**	1,229
Transportation services	**2,322**	2,339
Bank services	**2,178**	1,733
Other	**58,742**	67,885
	449,492	425,875

28. TRANSPORTATION AND SELLING EXPENSES

Transportation and selling expenses comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Transportation	**398,890**	472,576
Rent tax	**129,056**	41,120
Custom duties	**109,151**	72,959
Depreciation and amortization	**18,445**	17,356
Commission fees to agents and advertising	**18,179**	15,325
Personnel costs, including social taxes and withdrawals	**17,699**	17,423
Rent expenses	**6,286**	7,293
Other	**30,625**	26,497
	728,331	670,549

29. IMPAIRMENT LOSS

Impairment loss comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets *(Notes 6, 7, 8)*	**122,378**	293,178
Impairment of investments in joint ventures and associates *(Note 9)*	**5,921**	36,790
Impairment of assets held for sale	**4,872**	3,115
Accrual of expected credit losses on loans issued *(Note 10)*	**1,046**	2,053
Accrual/(reversal) of expected credit losses on cash and cash equivalents	**553**	(337)
(Reversal)/impairment of VAT receivable	**(4,602)**	7,553
Reversal of expected credit losses on amounts in credit institutions	**(2,046)**	(3,970)
(Reversal)/accrual of expected credit losses on other financial assets	**(1,414)**	4,901
Other	**3,075**	458
	129,783	343,741

For the following non-current assets impairment losses were recognised for years ended:

In millions of tenge	**2021**	2020
Impairment expense		
Almaty Electric Power Stations JSC CGU	**20,737**	–
Refining CGU of KMGI	**8,298**	162,455
Sunkar, Barys and Berkut, self-propelled barges (Barges)	**4,453**	10,297
EMG CGU	**–**	60,440
Other	**9,807**	36,586
Write-off		
Zhambyl project	**59,283**	–
Brownfields of KMG EP	**19,800**	19,692
KLPE	**–**	3,593
Samtyr, Zhayik, Saraishyk, Zaburunie projects	**–**	115
	122,378	293,178

Almaty Electric Power Stations JSC CGU

In 2021 the Group performed impairment test of the assets of ALES. The Group has estimated the recoverable amount of property, plant and equipment of ALES based on value in use, which is the sum of the estimated discounted future cash flows that the Group expects to receive from their use. As a result of the test, the Group recognized an impairment loss on property, plant and equipment of 20,737 million tenge.

As at December 31, 2020, there were no indicators of impairment.

29. IMPAIRMENT LOSS (continued)

CGUs of KMGI

In 2020, as a result of the test performed, KMGI recognized impairment loss of property, plant and equipment and intangible assets of 155,544 million tenge and 6,911 million tenge, respectively.

On July 2, 2021, an incident occurred at the Petromidia Refinery (further Petromidia), subsidiary of KMGI, that led to fire and resulted in temporarily interruption of the production until damaged facilities are repaired. KMGI conducted assessments to estimate the incident consequences and recognized impairment of property, plant and equipment of Petromidia for 1,615 million tenge.

For the year ended December 31, 2021, based on the results of the property, plant and equipment physical inspection, KMGI recognized an impairment loss of property, plant and equipment for 6,683 million tenge.

Barges

The recoverable amount of the barges of NMSC KazMorTransFlot LLP was determined on the basis of value-in-use method. Value-in-use was assessed as the present value of the future cash flows expected to be derived from the barges until the end of the existing and probable contracts at the discount rate of 10.7% (2020: 11.3%). As a result of the test, the Group recognized an impairment loss of 4,453 million tenge for the year ended December 31, 2021 in regards of Barys and Berkut barges (2020: 10,297 million tenge on Sunkar, Barys and Berkut barges).

EMG CGU

In 2020, Embamunaigas (further EMG), subsidiary of KazMunayGas Exploration Production JSC (further KMG EP), carried out an assessment of the recoverable amount of property, plant and equipment and exploration and evaluation assets due to the presence of impairment indicators such as decline in the forecasted oil prices.

The result of this assessment indicated that the carrying value of assets exceeded their estimated recoverable amount by 60,440 million tenge, particularly, 44,098 million tenge of property, plant and equipment and 16,342 million tenge of exploration and evaluation assets were impaired.

For the year ended December 31, 2021, no impairment or reversal of impairment indicators for property, plant and equipment, intangible assets and exploration and evaluation assets were observed.

Zhambyl project

For the year ended December 31, 2021 the Group has written off the exploration and evaluation assets in the amount of 59,283 million tenge of Zhambyl project, the subsoil use contract for which was terminated and the contract territory was relinquished to the Government.

Brownfields of KMG EP

For the year ended December 31, 2020 the Group has written off the exploration and evaluation assets in the amount of 12,829 million tenge as a result of termination of Ozen-Karamandybas exploration subsoil use contract, the contract territory of which was relinquished to the Government. Also, the Group partially reduced the contract area at Karaton-Sarkamys site and, accordingly, wrote off exploration and evaluation expenses in the amount of 6,863 million tenge.

As at December 31, 2021 the Group partially reduced the contract area at Taisoigan site and, accordingly, wrote off exploration and evaluation expenses in the amount of 19,800 million tenge.

30. FINANCE COSTS

Finance costs comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Interest on loans and debt securities issued	**446,272**	440,027
Interest on lease liabilities	**37,903**	33,853
Discount on provisions and other payables	**22,517**	20,557
Revaluation loss on financial assets at fair value through profit/loss	**10,791**	9,906
Interest on oil supply agreement *(Note 20)*	**3,885**	13,735
Discount on assets at rates below market	**2,687**	2,310
Financial guarantees	**721**	12,757
Finance costs for the early redemption of bonds *(Note 18)*	**–**	45,278
Other	**30,761**	30,530
	555,537	608,953

31. FINANCE INCOME

Finance income comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Interest income on amounts due from credit institutions and cash and cash equivalents	**76,876**	66,117
Revaluation gain on financial assets at fair value through profit/loss	**42,419**	10,765
Interest income from loans and financial assets	**28,477**	36,541
Income from financial guarantees	**14,839**	10,277
Income from subsidized interest rates on financial liabilities	**2,176**	29,558
Discount on liabilities at rates below market	**119**	11,201
Other	**9,992**	15,729
	174,898	180,188

32. SHARE IN PROFIT OF JOINT VENTURES AND ASSOCIATES, NET

Share in profit/(loss) of joint ventures and associates comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Asia Gas Pipeline LLP	**253,554**	175,339
Tengizchevroil LLP	**441,665**	173,476
Caspian Pipeline Consortium JSC	**90,904**	81,582
Mangistau Investments B.V.	**80,154**	16,749
Kazzinc LLP	**66,996**	75,280
Beineu Shymkent Gas Pipeline LLP	**65,533**	55,005
JV KATCO LLP	**29,278**	25,073
KazRosGas LLP	**20,952**	957
JV South Mining Chemical Company LLP	**14,334**	11,533
Kazakhstan − China Pipeline LLP	**13,464**	10,380
Kazakhoil-Aktobe LLP	**13,379**	2,448
Valsera Holdings B.V.	**11,868**	(6,137)
Forum Muider B.V.	**11,383**	11,504
Teniz Service LLP	**(3,089)**	3,891
Ural Group Limited BVI	**(11,060)**	(10,265)
Other	**42,767**	14,793
	1,142,082	641,608

33. INCOME TAX EXPENSES

Income tax expenses comprised the following for the years ended December 31:

In millions of tenge	**2021**	2020
Current income tax expenses		
Corporate income tax ("CIT")	**328,309**	190,640
Withholding tax on dividends and interest income	**47,752**	16,043
Excess profit tax	**1,237**	(194)
Deferred income tax expense/(benefit)		
Corporate income tax ("CIT")	**148,782**	17,090
Withholding tax on dividends and interest income	**34,990**	26,021
Excess profit tax	**(34)**	(2,985)
Income tax expenses	**561,036**	246,615

A reconciliation of income tax expenses applicable to profit before income tax at the statutory income tax rate (20% in 2021 and 2020) to income tax expenses was as follows for the years ended December 31:

In millions of tenge	**2021**	2020
Accounting profit before income tax	**2,469,393**	829,157
Income tax expenses on accounting profit	**493,879**	165,831
Tax effect of other items, which are not deductible	**75,821**	43,936
Change in unrecognized deferred tax assets	**(12,034)**	82,035
Effect of different corporate income tax rates	**46,818**	26,219
Excess profit tax	**1,203**	(3,179)
Share in non-taxable profit of joint ventures and associates	**(86,923)**	(102,536)
Other differences	**42,272**	34,309
Total corporate income tax expenses	**561,036**	246,615

33. INCOME TAX EXPENSES (continued)

Deferred tax balances, calculated by applying the statutory tax rates effective at the respective reporting dates to the temporary differences between tax basis of assets and liabilities and the amounts reported in the consolidated financial statements, are comprised of the following at December 31:

	2021				2020			
In millions of tenge	**Corporate income tax**	**Excess profit tax**	**Withholding tax**	**Total**	Corporate income tax	Excess profit tax	Withholding tax	Total
Deferred tax assets								
Property, plant and equipment	**35,346**	**–**	**–**	**35,346**	51,983	–	–	51,983
Tax loss carryforward	**827,839**	**–**	**–**	**827,839**	883,930	–	–	883,930
Employee related accruals	**18,500**	**–**	**–**	**18,500**	16,864	–	–	16,864
Allowance for expected credit losses of financial assets	**34,593**	**–**	**–**	**34,593**	36,876	–	–	36,876
Provision for environmental remediation	**85,226**	**–**	**–**	**85,226**	71,398	–	–	71,398
Other accruals	**159,865**	**–**	**–**	**159,865**	148,834	–	–	148,834
Other	**52,470**	**–**	**–**	**52,470**	34,648	–	–	34,648
Less: unrecognized deferred tax assets	**(640,459)**	**–**	**–**	**(640,459)**	(652,493)	–	–	(652,493)
Less: deferred tax assets offset with deferred tax liabilities	**(504,232)**	**–**	**–**	**(504,232)**	(512,773)	–	–	(512,773)
Deferred tax assets	**69,148**	**–**	**–**	**69,148**	79,267	–	–	79,267
Deferred tax liabilities								
Property, plant and equipment	**1,287,711**	**358**	**–**	**1,288,069**	1,127,858	392	–	1,128,250
Undistributed earnings of joint ventures and associates	**–**	**–**	**465,891**	**465,891**	–	–	419,083	419,083
Other	**83,889**	**–**	**–**	**83,889**	108,696	–	–	108,696
Less: deferred tax assets offset with deferred tax liabilities	**(504,232)**	**–**	**–**	**(504,232)**	(512,773)	–	–	(512,773)
Deferred tax liabilities	**867,368**	**358**	**465,891**	**1,333,617**	723,781	392	419,083	1,143,256
Net deferred tax liabilities	**(798,220)**	**(358)**	**(465,891)**	**(1,264,469)**	(644,514)	(392)	(419,083)	(1,063,989)

33. INCOME TAX EXPENSES (continued)

The movements in the net deferred tax liabilities were as follows for the years ended December 31:

	2021				2020			
In millions of tenge	**Corporate income tax**	**Excess profit tax**	**Withholding tax**	**Total**	Corporate income tax	Excess profit tax	Withholding tax	Total
Balance at January 1	**644,514**	**392**	**419,083**	**1,063,989**	614,048	3,377	356,581	974,006
Foreign currency translation	**2,993**	**–**	**11,818**	**14,811**	3,776	–	36,481	40,257
Charged to other comprehensive income	**340**	**–**	**–**	**340**	7,074	–	–	7,074
Recognised in equity *(Note 17)*	**1,571**	**–**	**–**	**1,571**	–	–	–	–
Acquisition of subsidiaries	**–**	**–**	**–**	**–**	3,560	–	–	3,560
Transfer from/(to) assets classified as held for sale or distribution to the Shareholder	**20**	**–**	**–**	**20**	(1,034)	–	–	(1,034)
Charged/(credited) to profit and loss	**148,782**	**(34)**	**34,990**	**183,738**	17,090	(2,985)	26,021	40,126
Balance at December 31	**798,220**	**358**	**465,891**	**1,264,469**	644,514	392	419,083	1,063,989

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized. Unrecognized deferred tax asset arising mainly from tax losses carry forward were equal to 640,459 million tenge as at December 31, 2021 (December 31, 2020: 652,493 million tenge).

Tax losses carryforwards as at December 31, 2021 in the Republic of Kazakhstan expire for tax purposes 10 (ten) years from the date they are incurred.

34. CONSOLIDATION

Subsidiaries included in the consolidated financial statements are presented as follows:

				Ownership percentage	
		Main activity	**Country of incorporation**	**2021**	2020
1	National Company "KazMunayGas" JSC ("NC KMG") and subsidiaries	Exploration, production, processing and transportation of oil and gas	Kazakhstan	**90.42%**	90.42%
2	National Company "QazaqGaz" JSC (former- National Company "KazTransGas" JSC) and subsidiaries	Exploration, production, transportation, sale and storage of natural gas and gas condensate	Kazakhstan	**100.00%**	90.42%
3	KMG Kashagan B.V.	Exploration and production of hydrocarbons	Netherlands	**95.00%**	95.00%
4	National Company "Kazakhstan Temir Zholy" JSC ("NC KTZh") and subsidiaries	Passenger and cargo transportation	Kazakhstan	**100.00%**	100.00%
5	National Atomic Company "Kazatomprom" JSC ("NAC KAP") and subsidiaries	Production and mining of uranium, rare metals	Kazakhstan	**75.00%**	75.00%
6	Samruk-Energy JSC ("Samruk-Energy") and subsidiaries	Electricity and heat production	Kazakhstan	**100.00%**	100.00%
7	Kazakhstan Electricity Grid Operating Company JSC ("KEGOC") and subsidiaries	Electricity transmission services	Kazakhstan	**90.00% + 1**	90.00% + 1
8	Kazpost JSC and subsidiaries	Postal and financial activities	Kazakhstan	**100.00%**	100.00%
9	Kazakhtelecom JSC ("KTC") and subsidiaries	Telecommunication services	Kazakhstan	**52.03%**	52.03%
10	Air Astana JSC ("Air Astana") and subsidiaries	Air transportation	Kazakhstan	**51.00%**	51.00%
11	Samruk-Kazyna Construction JSC and subsidiaries	Construction and real estate management	Kazakhstan	**100.00%**	100.00%
12	National Mining Company "Tau-Ken Samruk" and subsidiaries	Exploration, mining and processing of solid minerals	Kazakhstan	**100.00%**	100.00%
13	Samruk-Kazyna Ondeu LLP (former- United Chemical Company LLP) and subsidiaries	Development and implementation of projects in the chemical industry	Kazakhstan	**100.00%**	100.00%
14	Samruk-Kazyna Invest LLP and subsidiaries	Investments	Kazakhstan	**100.00%**	100.00%
15	Samruk-Kazyna Contract LLP	Procurement activities	Kazakhstan	**100.00%**	100.00%
16	Stantsiya Ekibastuzskaya GRES-2 JSC ("EGRES-2")	Power generation	Kazakhstan	**100.00%**	100.00%
17	SK Business Service LLP and subsidiaries	Transformation services, information and IT services	Kazakhstan	**100.00%**	100.00%
18	Qazaq Air JSC	Air transportation	Kazakhstan	**100.00%**	100.00%
19	Kazakhstan nuclear electric plants LLP	Servicing companies in the electricity sector	Kazakhstan	**100.00%**	100.00%
20	KOREM JSC	Electricity market operator	Kazakhstan	**–**	100.00%

35. RELATED PARTY DISCLOSURES

In accordance with IAS 24 *Related Party Disclosures*, parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operational decisions. In considering each possible related party relationship, attention is directed to the substance of the relationship, not merely the legal form.

Related parties include key management personnel of the Group, enterprises in which a substantial interest in the voting power is owned, directly or indirectly, by the Group's key management personnel and other entities controlled by the Government. Related party transactions were made on terms agreed to between the parties that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties.

35. RELATED PARTY DISCLOSURES (continued)

The following table provides the total amount of transactions, which have been entered into with related parties as at December 31:

In millions of tenge		Associates	Joint ventures	Other state-controlled entities
Due from related parties	**2021**	**6,189**	**28,732**	**35,262**
	2020	3,008	29,132	22,639
Due to related parties	**2021**	**40,544**	**282,269**	**8,186**
	2020	27,742	218,085	9,163
Sale of goods and services	**2021**	**215,647**	**281,751**	**835,404**
	2020	137,678	324,665	736,717
Purchase of goods and services	**2021**	**206,969**	**1,816,227**	**37,443**
	2020	268,838	1,163,124	23,381
Other (loss)/income	**2021**	**714**	**7,243**	**3,823**
	2020	8,870	26,557	3,756
Cash and cash equivalents, and amounts due from credit institutions (assets)	**2021**	**–**	**78**	**154,768**
	2020	–	242	262,012
Loans issued	**2021**	**14,169**	**300,929**	**14,100**
	2020	17,279	313,509	5,559
Borrowings	**2021**	**22,438**	**4**	**964,744**
	2020	14,004	4	1,065,166
Other assets	**2021**	**17,204**	**28,912**	**160,638**
	2020	6,833	16,802	158,936
Other liabilities	**2021**	**41,258**	**59,415**	**54,610**
	2020	65,329	46,634	39,063
Interest accrued due from related parties	**2021**	**2,547**	**32,796**	**12,753**
	2020	6,733	31,424	26,820
Interest accrued due to related parties	**2021**	**4,529**	**5,258**	**79,655**
	2020	12,462	4,763	79,974

As at December 31, 2021 some of the Group's borrowings of 42,907 million tenge were guaranteed by the Government of the Republic of Kazakhstan (December 31, 2020: 48,121 million tenge).

Total compensation to key management personnel included in general and administrative expenses in the consolidated statement of comprehensive income was equal to 6,406 million tenge for the year ended December 31, 2021 (December 31, 2020: 6,247 million tenge). Compensation to key management personnel mainly consists of contractual salary and other payments based on achievement of operating results.

36. FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial instruments consist of borrowings, loans from the Government of the Republic of Kazakhstan, lease liabilities, amounts due to the customers, derivatives, cash and cash equivalents, loans issued, amounts due from credit institutions, other financials assets, as well as accounts receivable and accounts payable. The main risks arising from the Group's financial instruments are interest rate risk, foreign currency risk and credit risk. The Group also monitors the liquidity risk arising from all financial instruments.

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates. The Group limits interest rate risk by monitoring changes in interest rates in the currencies in which its cash, investments and borrowings are denominated.

The Group's exposure to interest risk relates primarily to the Group's long-term and short-term borrowings with variable interest rates *(Note 18)*.

36. FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Interest rate risk (continued)

The following table demonstrates the sensitivity of the Group's profit before income tax (through the impact on variable rate borrowings) to a reasonably possible change in variable LIBOR interest rates, with all other variables held constant.

In millions of tenge	Increase/ (decrease) in basis points*	Effect on profit before income tax
2021		
US dollar	**125/(25)**	**(12,148)/2,369**
2020		
US dollar	100/(25)	(8,942)/2,235

* *1 basis point = 0.01%.*

Currency risk

As a result of significant borrowings, lease liabilities, and trade accounts payable, cash and cash equivalents, amounts due from credit institutions and accounts receivable denominated in the US dollars, the Group's consolidated financial position can be affected significantly by movement in the US dollar / tenge exchange rates.

The following table demonstrates the sensitivity of the Group's profit before income tax to a reasonably possible change in the US dollar and euro, with all the variables held constant.

In millions of tenge	Increase/(decrease) in exchange rate	Effect on profit before income tax
2021		
US dollar	**13.00%/(10.00%)**	**(353,754)/270,863**
Euro	**13.00%/(10.00%)**	**(9,977)/7,675**
2020		
US dollar	14.00%/(11.00%)	(431,973)/339,984
Euro	14.00%/(11.00%)	(10,545)/8,285

Credit risk

Credit risk arising from the inability of a party to meet the terms of the Group's financial instrument contracts is generally limited to the amounts, if any, by which the counterparty's obligations exceed the obligations of the Group to that party. It is the Group's policy to enter into financial instruments with a diversity of creditworthy parties. The maximum exposure to credit risk is represented by carrying amount of each financial asset.

The Group considers that its maximum exposure is reflected by the amount of loans issued *(Note 10)*, amount due from credit institutions *(Note 11)*, trade accounts receivable and other current assets *(Note 15)*, other financial assets *(Note 12)*, and cash and cash equivalents *(Note 16)*, net of allowances for expected credit losses recognized at the reporting date.

Concentrations of credit risk may arise from exposures to a single debtor or to groups of debtors having similar characteristics such that their ability to meet their obligations is expected to be affected similarly by changes in economic or other conditions.

The Group has a policy that ensures enforcement of constant control procedures for sales to only be made to buyers with an appropriate credit history and that an acceptable credit exposure limit is not exceeded. Credit risk is minimised by the fact that the Group operates on a prepayment basis with the majority of its buyers.

36. FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in raising funds to meet commitments associated with its financial liabilities. Liquidity risk may result from an inability to sell a financial asset quickly at price close to its fair value.

Liquidity requirements are monitored on a regular basis and management ensures that sufficient funds are available to meet any commitments as they arise.

The table shown below summarizes the maturity profile of the Group's financial liabilities at December 31 based on contractual undiscounted payments.

In millions of tenge	On demand	Due later than 1 month but not later than 3 months	Due later than 3 months but not later than 1 year	Due later than 1 year but not later than 5 years	Due after 5 years	Total
At December 31, 2021						
Loans from the Government of the Republic of Kazakhstan	**13**	**24**	**21,298**	**173,638**	**1,851,202**	**2,046,175**
Borrowings	**299,900**	**101,620**	**928,299**	**3,572,501**	**7,752,556**	**12,654,876**
Lease liabilities	**8,147**	**31,208**	**110,723**	**375,346**	**135,925**	**661,349**
Due to customers	**39,975**	**–**	**4**	**16**	**–**	**39,995**
Financial guarantees	**29,408**	**16,785**	**59,393**	**191,499**	**106,300**	**403,385**
Trade and other payables	**461,775**	**587,349**	**72,589**	**11,679**	**353**	**1,133,745**
	839,218	**736,986**	**1,192,306**	**4,324,679**	**9,846,336**	**16,939,525**
At December 31, 2020						
Loans from the Government of the Republic of Kazakhstan	13	24	43,343	92,154	2,007,592	2,143,126
Borrowings	79,199	89,703	1,005,872	3,608,639	7,506,849	12,290,262
Finance lease liabilities	4,953	25,395	106,419	335,323	123,909	595,999
Due to customers	40,356	–	8	13	–	40,377
Financial guarantees	27,404	20,525	64,625	273,599	103,299	489,452
Trade and other payables	348,453	416,480	64,588	22,227	1,448	853,196
	500,378	552,127	1,284,855	4,331,955	9,743,097	16,412,412

Capital management

The Group manages its capital primarily through capital management of its subsidiaries while conducting its oversight function. Major objective of the capital management is to ensure that subsidiaries of the Group will be able to continue as a going concern while maximising the return to shareholders through the optimisation of the debt and equity balance. The Group manages capital of its subsidiaries by setting various performance indicators tailored to the business need and industry specific matters of each subsidiary.

The Group manages capital of its subsidiaries by setting various performance indicators tailored to the business need and industry specific matters of each subsidiary. Key performance indicators ("KPI") used by the Group to manage capital of its subsidiaries are ratios of: Debt to Earnings before Interest, Taxes, Depreciation and Amortization, and Interest ("D/EBITDA") from continuing and discontinued operations; and Debt to Equity ("D/E"). Debt is considered to be equal to all borrowings, debt securities, guarantee and finance lease liabilities of relevant subsidiaries reduced by value of cash and cash equivalents. Equity is considered to be equal to the entire equity of the subsidiary attributable to majority shareholders.

36. FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Capital management (continued)

Allowed maximum for the indicator is approved for each subsidiary based on the needs and specifics of its business and varies within following ranges (consolidated KPI's for the Group have been presented for reference purposes as the Group does not monitor KPI's on the consolidated level):

KPI	2021	2020
D/EBITDA	**2.32**	3.58
D/E	**0.54**	0.59

In billions of tenge	2021	2020
Borrowings *(Note 18)*	**7,863**	7,459
Loans from the Government of the Republic of Kazakhstan *(Note 19)*	**579**	593
Lease liabilities *(Note 21)*	**510**	515
Derivative instruments	**2**	1
Guaranteed principal amount of liabilities of entities outside the Group	**341**	427
Total debt	**9,295**	8,995
Less: cash and cash equivalents	**(2,811)**	(2,228)
Net debt	**6,484**	6,767
EBITDA	**3,998**	2,512
Total equity	**17,173**	15,152

Fair values of financial instruments

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities.
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly.
- Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

As at December 31, 2021 and 2020 the carrying amount of the following Group's financial instruments is a reasonable estimate of their fair value:

In millions of tenge	Level 1	Level 2	Level 3	December 31, 2021
Financial instruments category				
Assets				
Loans issued at fair value through profit and loss	**–**	**–**	**123,161**	**123,161**
Financial assets measured at fair value through OCI	**1,134**	**20,741**	**60**	**21,935**
Financial assets at fair value through profit and loss	**74,356**	**14,486**	**32,913**	**121,755**
Derivative financial assets	**–**	**14,153**	**–**	**14,153**

In millions of tenge	Level 1	Level 2	Level 3	December 31, 2020
Financial instruments category				
Assets				
Loans issued at fair value through profit and loss	–	–	138,024	138,024
Financial assets measured at fair value through OCI	8,988	47,779	63	56,830
Financial assets at fair value through profit and loss	34,643	3,897	22,676	61,216
Derivative financial assets	–	97	1,048	1,145

36. FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

Fair values of financial instruments (continued)

	December 31, 2021				
			Fair value by level of assessment		
In millions of tenge	**Carrying amount**	**Fair value**	**Quotations in an active market (Level 1)**	**From the observed market (Level 2)**	**Based on the significant amount of unobserved (Level 3)**
Financial assets					
Loans issued at amortized cost and finance lease receivables	**280,955**	**273,189**	**–**	**14,800**	**258,389**
Amounts due from credit institutions	**776,662**	**770,714**	**546,900**	**215,651**	**8,163**
Financial liabilities					
Borrowings	**7,862,692**	**8,575,232**	**5,039,417**	**2,484,584**	**1,051,231**
Loans from the Government of the Republic of Kazakhstan	**579,369**	**374,861**	**–**	**374,861**	**–**
Guarantee obligations	**40,456**	**38,655**	**–**	**33,330**	**5,325**

	December 31, 2020				
			Fair value by level of assessment		
In millions of tenge	Carrying amount	Fair value	Quotations in an active market (Level 1)	From the observed market (Level 2)	Based on the significant amount of unobserved (Level 3)
Financial assets					
Loans issued at amortized cost and finance lease receivables	284,212	271,526	–	17,441	254,085
Amounts due from credit institutions	489,572	498,082	335,558	162,524	–
Financial liabilities					
Borrowings	7,459,200	8,370,443	5,246,774	2,217,000	906,669
Loans from the Government of the Republic of Kazakhstan	593,222	416,166	–	416,166	–
Guarantee obligations	53,374	51,693	–	35,972	15,721

The fair value of the above financial instruments has been calculated by discounting the expected future cash flows at prevailing interest rates.

The significant unobservable inputs used in the fair value measurements categorized within Level 3 of the fair value hierarchy are shown below:

	Valuation technique	**Significant unobservable inputs**	**Range as of December 31, 2021**	**2020**
Loans issued at amortized cost and finance lease receivables	Discounted cash flow method	Interest/ discount rate	**3.1%-30%**	7.5%-15%
Amounts due from credit institutions			**6.94%**	–
Borrowings			**3.5%-17%**	1.9%-13%
Financial guarantee issued			**4.5%-5.25%**	4.9%

36. FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES (continued)

IBOR Reform

Following the decision by global regulators to phase out IBORs and replace them with alternative reference rates, the Group has disclosed contracts that could be affected. During 2021, the Group has not completed the transition of a significant portion of its IBOR exposure to risk free rates (RFRs) for those interest rate benchmarks such as USD LIBOR that will cease to be available after June 30, 2023 and for which the transition date has not yet been determined.

IBOR reform exposes the Group to various risks, which the project is managing and monitoring closely. These risks include but are not limited to the following:

- Conduct risk arising from discussions with market counterparties due to the amendments required to existing contracts necessary to effect IBOR reform;
- Financial risk to the Group that markets are disrupted due to IBOR reform giving rise to financial losses;
- Pricing risk from the potential lack of market information if liquidity in IBORs reduces and RFRs are illiquid and unobservable;
- Operational risk arising from changes to the Group's IT systems and processes, also the risk of payments being disrupted if an IBOR ceases to be available;
- Accounting risk if the Group's hedging relationships fail and from unrepresentative income statement volatility as financial instruments transition to RFRs.

The table below shows the Group's exposure to significant IBORs subject to reform that have yet to transition to the alternative interest rate benchmarks as at the current year end and the prior year end. The table excludes exposures to IBOR that will expire before transition is required:

In millions of tenge	USD Libor	December 31, 2021
Non-derivative financial liabilities	**91,861**	**91,861**
Borrowings	91,861	91,861

37. COMMITMENTS AND CONTINGENCIES

Operating environment

Kazakhstan continues economic reforms and development of its legal, tax and regulatory frameworks as required by a market economy. The future stability of the kazakhstan economy is largely dependent upon these reforms and developments and the effectiveness of economic, financial and monetary measures undertaken by the government.

Since the beginning of March 2020, the world markets are experiencing a significant volatility in oil demand and oil prices, in particular as a result of COVID-19 pandemic. Kazakhstan tenge value has fallen significantly against the major world currencies. In the opinion of the Group's management, these trends will not have a material impact on the Group's future financial position, results of operations and business prospects.

Commodity price risk

The Group generates most of its revenue from the sale of commodities, primarily crude oil and oil products. Historically, the prices of these products have been volatile and have fluctuated widely in response to changes in supply and demand, market uncertainty, the performance of the global or regional economies and cyclicality in industries.

Prices may also be affected by government actions, including the imposition of tariffs and import duties, speculative trades, an increase in capacity or an oversupply of the Group's products in its main markets. These external factors and the volatility of the commodity markets make it difficult to estimate future prices.

A substantial or extended decline in commodity prices would materially and adversely affect the Group's business and the consolidated financial results and cash flows of operations. The Group does not hedge significantly its exposure to the risk of fluctuations in the price of its products.

37. COMMITMENTS AND CONTINGENCIES (continued)

Transfer pricing control

Transfer pricing control in Kazakhstan has a very wide scope and applies to many transactions that directly or indirectly relate to international business regardless of whether the transaction participants are related or not. The transfer pricing legislation requires that all taxes applicable to transaction participants are related or not. The transfer pricing legislation requires that all taxes applicable to a transaction should be calculated based on market price determined in accordance with the arm's length principle.

The new law on transfer pricing came into effect in Kazakhstan from January 1, 2009. The new law is not explicit and there is little precedence with some of its provisions. Moreover, the law is not supported by detailed guidance, which is still under development. As a result, application of transfer pricing control to various types of transactions is not clearly regulated.

Because of the uncertainties associated with the Kazakhstan transfer pricing legislation, there is a risk that the tax authorities may take a position that differs from the Group's position, which could result in additional taxes, fines and interest at December 31, 2021.

As at December 31, 2021 management believes that its interpretation of the transfer pricing legislation is appropriate and that it is probable that the Group's positions with regard to transfer pricing will be sustained.

Taxation

Kazakhstan's tax legislation and regulations are subject to ongoing changes and varying interpretations. Instances of inconsistent opinions between local, regional and national tax authorities are not unusual, including opinions with respect to IFRS treatment of revenues, expenses and other items in the financial statements. The current regime of penalties and interest related to reported and discovered violations of Kazakhstan's tax laws are severe. Due to uncertainties associated with Kazakhstan's tax system, the ultimate amount of taxes, penalties and interest, if any, may be in excess of the amount expensed to date and accrued at December 31, 2021. As at December 31, 2021, Management believes that its interpretation of the relevant legislation is appropriate and that it is probable that the Group's tax positions will be sustained, except as provided for or otherwise disclosed in these consolidated financial statements.

Horizontal monitoring

From July 2020, the State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan (hereinafter - "SRC") launched a pilot project to introduce horizontal monitoring, which will last until December 31, 2023. The main goal of horizontal monitoring is to create partnerships between tax authorities and large taxpayers by timely response and prevention of their risky transactions that may lead to violations of tax, currency and other legislation, which is controlled by tax authorities. In order to implement the pilot project of SRC, together with the business community, the rules for its implementation were developed and approved, and the categories of taxpayers were determined.

In 2021 a number of subsidiaries of the Group have become parties to the pilot project to introduce horizontal monitoring which includes the procedure of historical data inspection. In February 2022 SRC completed the inspection of historical data of EGRES-1 for the period of 2016-2020 and provided recommendations. The main recommendation is related to the discrepancy between fixed assets by belonging to asset groups according to the National Classifier of Fixed Assets. EGRES-1 expressed its disagreement with this recommendation and continues to work to clarification its position.

Comprehensive tax audit at Atyrau refinery for 2015-2017

On December 15, 2020, based on 2015-2017 comprehensive tax audit, Atyrau refinery received additional tax assessment for VAT for 9,257 million tenge, including penalties, and reduction in tax carry-forward losses for 29,026 million tenge. Atyrau refinery has not agreed with tax audit results, and, on January 28, 2021, sent an appeal to the Ministry of Finance of the Republic of Kazakhstan. As of December 31, 2021, appeal consideration was suspended by the Ministry of Finance of the Republic of Kazakhstan until clarification of the circumstances. The Group believes that the risk of additional tax assessment is remote, as such, the Group did not recognize any provisions as of December 31, 2021.

37. COMMITMENTS AND CONTINGENCIES (continued)

Legal proceedings

The proceedings initiated against Mr. Stati and his related parties related to the arrest of shares KMG Kashagan B.V. belonging to the Fund

The proceedings initiated against Mr, Stati and his related parties on the suit of the Fund due to the arrest of shares KMG Kashagan B,V, belonging to the Fund

On September 14, 2017 the pre-judgement attachment in respect of the Fund's rights on management of 50% KMG Kashagan B.V. shares worth 5.2 billion US dollars was imposed with regard to the decision of the Amsterdam Court (the "Pre-judgement Attachment").

The named Pre-judgement Attachment was imposed as part of the claim for recognition and enforcement of the arbitral award on the matter of Anatolie Stati, Gabriel Stati, Ascom Group SA and Terra Raf Trans Trading Ltd, against the Republic of Kazakhstan issued in 2013 by the Arbitration Tribunal at the Arbitration Institute of the Stockholm Chamber of Commerce.

On December 18, 2020, the Supreme Court overturned the decision of the Amsterdam Court of Appeal dated May 7, 2019 to maintain the arrest and sent the case to the Court of Appeal in The Hague. The Court of Appeal in Hague started on April 4, 2022.

Currently, the Fund makes all necessary arrangements to protect its interest in accordance with the established procedure and will continue to defend its rights and legitimate interests.

The Main process on Mr. Stati's claim, filed on December 7, 2017, in which Mr. Stati asks the court to recognize the Fund as part of the Republic of Kazakhstan and oblige the Fund to comply with the arbitral award

On March 17, 2021, hearings were held on the Main process on Mr. Stati's claim, filed on December 7, 2017, in which Mr. Stati asks the court to recognize the Fund as part of the Republic of Kazakhstan and oblige the Fund to comply with the arbitral award of December 19, 2013.

On April 28, 2021, the District Court of Amsterdam granted the request made by the Fund to postpone the Main Process pending the decision of the Court of Appeal in The Hague to challenge the restriction on the shares of KMG Kashagan B.V.

Currently, the Fund makes all necessary arrangements to protect its interest in accordance with the established procedure and will continue to defend its rights.

The civil litigation at KMG International N.V.

Faber Invest & Trade Inc. (further Faber), the non-controlling shareholder of KMGI subsidiaries, resumed several previous civil filings in 2020, one of which challenged the increase in the Rompetrol Rafinare Constanta, the KMGI subsidiary, share capital in 2003-2005. The hearings have been held periodically, but no final decisions were made. On July 13, 2021, the court rejected the complaint of Faber.

However, Faber appealed against this decision. As a result of hearing in December 2021 the court admitted the appeal and sent back the file to be re-settled. Next hearings are scheduled to May 2022.

The Group believes that its position with regard to the new Faber filing will be sustained similar to the matters resolved in 2020 in favour of the Group, and as such, the Group did not recognize any provisions as of December 31, 2021.

Settlement of the arbitration between KazTransGas JSC ("KTG") and the partners of the North Caspian project on gas price calculus from the Kashagan field

On February 19, 2021, a decision was issued of the arbitration proceedings on the claim of KTG against the partners of the North Caspian project on gas price calculus from the Kashagan field (Decision). The Decision was issued in favor of KTG. In accordance with the Decision, the parties, within 30 days from the date of its adoption, must make calculations based on the principles established by the Decision and determine the amounts to be paid in favor of KTG, including reimbursement of legal costs.

During 2021 KTG received from the partners of the North Caspian Project under this Resolution 112,058 million tenge, including VAT (equivalent to 262 million US dollars) and adjusted the cost of purchased gas for resale in the amount of 85,396 million tenge (equivalent to 200 million US dollars), and also recognized fines, penalties and reimbursement of arbitration costs in the total amount of 11,951 million tenge (equivalent to 28 million US dollars) in other income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

37. COMMITMENTS AND CONTINGENCIES (continued)

Cost recovery audits

Under the base principles of the production sharing agreements, the Government transferred to contractors the exclusive rights to conduct activities in the subsurface use area, but did not transfer rights to this subsurface use area either to ownership or lease. Thus, all extracted and processed oil (i.e. the hydrocarbons produced) are the property of the Government. Works are carried out on the basis of compensation and the Government pays to the contractors not in cash but in the form of the portion of oil production, thereby allowing the contractors to recover their costs and earn profit.

In accordance with the production sharing agreements, not all costs incurred by the contractors could be reimbursed. Certain expenditures need to be approved by the authorized bodies. The authorized bodies conduct the cost recovery audits. In accordance with the cost recovery audits completed prior to December 31, 2021, certain amounts of the costs incurred by contractors were assessed as non-recoverable. The parties to the production sharing agreements are in negotiations with respect to the recoverability of those costs.

As of December 31, 2021 the Group's share in the total disputed amounts of costs is 979,556 million tenge (2020: 871,407 million tenge). The Group and its partners under the production sharing agreements are in negotiation with the Government with respect to the recoverability of these costs.

Kazakhstan local market obligation

The Government requires oil companies in the RK to supply a portion of the products to meet the Kazakhstan domestic energy requirement on an annual basis, mainly to maintain oil products supply balance on the local market and to support agricultural producers during the spring and autumn sowing and harvest campaigns.

Kazakhstan local market oil prices are significantly lower than export prices and even lower than the normal domestic market prices determined in an arm-length transaction. If the Government does require additional crude oil to be delivered over and above the quantities currently supplied by the Group, such supplies will take precedence over market sales and will generate substantially less revenue than crude oil sold on the export market, which may materially and adversely affect the Group's business, prospects, consolidated financial position and performance.

In 2021, in accordance with its obligations, the Group delivered 7,114 thousand tons of crude oil (2020: 6,401 thousand tons) to the Kazakhstan market.

Oil supply commitments

As of December 31, 2021 the Group had commitments under the oil supply agreements in the total amount of 8.6 million ton (as at December 31, 2020: 13.5 million ton).

Commitments under oilfield and mining field licenses and subsurface use contracts

As at December 31, 2021 the Group had following commitments on fulfillment of minimal work programs with respect to the requirements of their oilfield and mining licenses and related subsurface use contracts with the Government (in millions of tenge):

Year	Capital expenditures	Operational expenditures
2022	566,633	179,784
2023	357,231	92,853
2024	437,950	94,638
2025	348,609	98,423
2026-2059	3,328,346	1,544,673
Total	**5,038,769**	**2,010,371**

Capital commitments

As at December 31, 2021 the Group, including its joint ventures and associates, had capital commitments of approximately 2,269,940 million tenge related to acquisition and construction of property, plant and equipment (as at December 31, 2020: 2,416,411 million tenge).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

37. COMMITMENTS AND CONTINGENCIES (continued)

Capital commitments (continued)

As at December 31, 2021, the Group had commitments in the total amount of 592,889 million tenge (as at December 31, 2020: 321,724 million tenge) under the investment programs approved by the joint order of Ministry of Energy of the Republic of Kazakhstan and Committee on Regulation of Natural Monopolies and Protection of Competition of the Ministry of National Economy of the Republic of Kazakhstan (hereinafter − the "CRNM") to facilitate production units.

Commitments on secondary use of anti-crisis funds

As at December 31, 2021 the Fund's commitments included commitments to finance the program "Nurly Zher" programme (formerly the Affordable Housing Programme 2020) in the amount of 3,241 million tenge and commitments to finance investment projects in the amount of 8,919 million tenge, including the following:

- Financing the implementation of the investment project "Construction of an integrated gas chemical complex in Atyrau region. The first Phase" in the amount of not greater than 8,063 million tenge;
- Financing of the project "Creation of a special economic zone "Taraz Chemical Park" in the amount of 201 million tenge;
- Financing the acquisition of three leased aircraft by Qazaq Air JSC in the amount of 655 million tenge.

38. SEGMENT REPORTING

For management purposes, the Group is organized into organizational business units based on their products and services, and has 8 (eight) reportable operating segments *(Note 1)*.

Certain of operating segments have been formed by aggregation of smaller reportable segments in line with the organizational structure of the Group. Each reportable segment maintains its accounting records in line with IFRS. Financial performance of each segment prepared in line with IFRS is reported to the chief operating decision maker for the purposes of making decisions about allocating resources to the segment and assessing its performance.

Eliminations represent the exclusion of intra-group turnovers. Inter-segment transactions were made on terms agreed to between the segments that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties.

38. SEGMENT REPORTING (continued)

The following table represents information about profit and loss, assets and liabilities of operating segments of the Group for 2021:

In millions of tenge	Oil and gas	Mining	Trans-portation	Com-munication	Energy	Industrial	Corporate center	Other	Elimination	Total
Revenues from sales to external customers	7,314,716	1,415,150	1,619,200	624,383	649,753	30,567	41,144	14,745	–	11,709,658
Revenues from sales to other segments	47,846	79	4,026	4,184	87,462	5,529	297,783	22,320	(469,229)	–
Total revenue	**7,362,562**	**1,415,229**	**1,623,226**	**628,567**	**737,215**	**36,096**	**338,927**	**37,065**	**(469,229)**	**11,709,658**
Geographical markets										
Kazakhstan	1,343,883	749,320	1,399,420	607,216	712,787	27,983	338,927	37,065	(469,229)	4,747,372
Other countries	6,018,679	665,909	223,806	21,351	24,428	8,113	–	–	–	6,962,286
Gross profit	1,896,249	288,594	407,454	222,481	190,305	6,959	275,203	18,122	(335,152)	2,970,215
General and administrative expenses	(215,143)	(37,336)	(108,931)	(57,456)	(26,152)	(6,595)	(24,419)	(3,970)	30,510	(449,492)
Transportation and selling expenses	(692,357)	(15,784)	(6,950)	(13,769)	(12,249)	(1,151)	–	(5)	13,934	(728,331)
Finance income	117,541	11,108	22,062	9,004	11,290	1,863	28,152	34,919	(61,041)	174,898
Finance costs	(304,745)	(7,425)	(151,194)	(49,417)	(54,315)	(6,173)	(37,786)	(34,576)	90,094	(555,537)
Share in profits/(loss) of joint ventures and associates	999,424	118,554	10,826	–	11,509	(219)	1,986	2	–	1,142,082
Foreign exchange gain/(loss), net	110,922	3,131	3,727	2,349	2,390	(28,979)	(93,264)	(363)	(690)	(777)
Depreciation, depletion and amortization	(595,203)	(69,949)	(195,162)	(121,822)	(76,816)	(6,240)	(2,147)	(2,658)	3,800	(1,066,197)
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets	(95,961)	4,885	(1,860)	(5,961)	(20,849)	(2,542)	–	(90)	–	(122,378)
Impairment of other assets	(162)	(2,862)	(7)	(396)	577	(500)	(18,326)	624	13,647	(7,405)
Income tax expenses	(388,631)	(61,510)	(36,617)	(30,196)	(30,806)	(468)	(2,942)	(4,370)	(5,496)	(561,036)
Total net profit/(loss) for the year	**1,456,260**	**291,732**	**150,356**	**89,760**	**76,273**	**(38,795)**	**130,893**	**10,467**	**(258,589)**	**1,908,357**
Other segment information										
Total assets of the segment	18,592,151	2,739,861	4,133,241	1,341,590	1,616,981	1,128,970	8,309,598	373,645	(7,926,279)	30,309,758
Total liabilities of the segment	6,790,420	469,838	2,820,223	667,222	788,374	884,803	1,790,290	217,503	(1,292,007)	13,136,666
Allowances for expected credit losses for doubtful accounts	(2,943)	(248)	108	(2,768)	(974)	125	–	115	(400)	(6,985)
Investments in joint ventures and associates	4,851,977	703,195	27,688	–	90,472	5,215	35,013	15	(32,341)	5,681,234
Capital expenditures	(535,515)	(71,066)	(412,021)	(123,986)	(97,574)	(336,848)	(307)	(4,883)	9,758	(1,572,442)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

38. SEGMENT REPORTING (continued)

The following table represents information about profit and loss, assets and liabilities of operating segments of the Group for 2020:

In millions of tenge	Oil and gas	Mining	Trans-portation	Com-munication	Energy	Industrial	Corporate center	Other	Elimination	Total
Revenues from sales to external customers	4,838,789	1,227,048	1,309,894	561,602	555,963	12,151	30,691	19,871	–	8,556,009
Revenues from sales to other segments	28,911	189	3,969	4,662	124,398	8,586	272,124	12,099	(454,938)	–
Total revenue	4,867,700	1,227,237	1,313,863	566,264	680,361	20,737	302,815	31,970	(454,938)	8,556,009
Geographical markets										
Kazakhstan	1,090,531	661,039	1,193,100	547,388	654,024	15,288	302,815	31,970	(454,938)	4,041,217
Other countries	3,777,169	566,198	120,763	18,876	26,337	5,449	–	–	–	4,514,792
Gross profit	1,143,283	278,252	276,454	186,966	179,342	691	182,407	14,830	(289,529)	1,972,696
General and administrative expenses	(191,562)	(32,936)	(100,820)	(49,214)	(26,988)	(5,698)	(24,540)	(4,012)	9,895	(425,875)
Transportation and selling expenses	(639,237)	(14,444)	(4,870)	(12,869)	(12,647)	(1,113)	–	–	14,631	(670,549)
Finance income	110,261	6,296	47,448	7,673	10,231	686	36,538	15,586	(54,531)	180,188
Finance costs	(320,188)	(8,203)	(187,814)	(52,992)	(59,364)	(5,968)	(37,210)	(15,331)	78,117	(608,953)
Share in profits/(loss) of joint ventures and associates, net	518,157	115,387	11,111	–	11,685	(2,083)	(12,649)	–	–	641,608
Foreign exchange gain/(loss), net	199,385	4,076	(57,823)	7,124	2,694	(31,029)	(75,732)	1,831	(432)	50,094
Depreciation, depletion and amortization	(552,964)	(62,880)	(180,682)	(114,241)	(78,336)	(7,088)	(2,208)	(1,744)	1,346	(998,797)
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets	(263,358)	(7,107)	(12,864)	(5,792)	(466)	(3,591)	–	–	–	(293,178)
Impairment of other assets	(37,932)	(3,015)	(19,380)	(890)	(1,104)	(1,659)	12,120	(1,203)	2,500	(50,563)
Income tax expenses	(117,493)	(64,875)	(9,010)	(20,975)	(24,216)	(130)	(3,724)	(4,143)	(2,049)	(246,615)
Total net profit/(loss) for the year	262,506	293,832	(35,745)	59,924	72,821	(52,164)	201,679	7,009	(227,320)	582,542
Other segment information										
Total assets of the segment	16,854,461	2,411,794	3,861,110	1,220,457	1,574,935	804,995	7,738,822	337,307	(7,321,035)	27,482,846
Total liabilities of the segment	6,535,391	377,221	2,701,075	664,364	756,442	609,561	1,696,538	199,447	(1,208,808)	12,331,231
Allowances for expected credit losses for doubtful accounts	(2,222)	320	(552)	(2,470)	(1,860)	(541)	–	124	218	(6,983)
Investments in joint ventures and associates	4,214,205	650,943	21,218	–	79,035	5,273	47,330	13	(32,341)	4,985,676
Capital expenditures	(490,344)	(49,446)	(340,727)	(116,242)	(93,861)	(349,854)	(601)	(3,086)	9,725	(1,434,436)

39. SUBSEQUENT EVENTS

Dividends received

In January 2022, the Group received dividends from joint ventures of the Group: Kazakhoil-Aktobe LLP, KazGerMunay LLP and Mangistau Investment B.V. of 3,000 million tenge, 4,338 million tenge and 97 million US dollars (equivalent to 41,996 million tenge as at payment date), respectively.

Dividends declared to the Group

On March 31, 2022, the associated company Kazzinc LLP announced the distribution of net profit in the form of a dividend to the participants. The amount of declared dividends to the Group amounted to 88,819 million tenge, 10,000 million tenge of which were paid on April 18, 2022.

Other distributions to the Shareholder

On April 15 2022, the Group made a payment to finance projects aimed at the development of Kazakhstani professional sports and elite sports in the amount of 9,700 million tenge based on the Resolution of the Shareholder.

Inspections

Starting from January 2022, various state bodies have initiated inspections in some companies of the Group. Currently, the inspections have not been completed and, accordingly, the Group is unable to assess the impact on the consolidated financial statements.

State of emergency

On January 2, 2022 protests started in Mangystau region of Kazakhstan related to significant increase in the liquified petroleum gas retail price. Further, protests began in other cities and resulted in riots, damage to property and loss of life. On January 5, 2022 the Government declared a state of emergency.

During the protests internet access was restricted across Kazakhstan, bank operations and transactions were suspended, the stock and commodity exchanges were closed. From January 5, 2022 the movement of trains at some stations had been suspended. Also, flights to Almaty from January 5 to January 14, 2022, and to Aktau from January 4 to January 9, 2022 had been suspended. During the period from January 9 till January 14, 2022, the Group has fully ensured the stability of railway freight and passenger transportation and air traffic.

As a result of the above protests and state of emergency the President of the Republic of Kazakhstan has made certain public announcements regarding possible measures including amendments to the tax legislation, introducing measures for financial stability, controlling and stabilizing the inflation rate and the tenge exchange rate. On January 19, 2022 the state of emergency was lifted.

On January 24, 2022, the Shareholder approved an action plan (hereinafter − the "Plan"), which was developed in pursuance of the assignment by the President of Kazakhstan on the subject of reforming all areas of activity of the Fund and its portfolio companies. The Plan reflects the implementation of systematic measures to change the personnel policy, the procurement system, initiatives to increase the corporate social responsibility by the Fund and its portfolio companies, support business, improve the processes of the compliance service, new approaches to dividend and investment policy, privatization of assets and development of human capital. The Group has started to implement the Plan.

The Group is currently unable to quantify what the impact, if any, may be on the financial position of the Group of any new measures the Government may take or any impact on the Kazakhstan economy as a result of the above protests and state of emergency.

Impact of sanction risks

In February 2022, due to the conflict between the Russian Federation and Ukraine, numerous sanctions have been announced by majority of western countries against the Russian Federation. These sanctions are targeted to have a negative economic impact on the Russian Federation.

Due to the growing geopolitical tensions, since February 2022, there has been a significant increase in volatility on the securities and currency markets, as well as a significant depreciation of the tenge against the US dollar and the euro.

The Group regards these events as non-adjusting events after the reporting period, the quantitative effect of which cannot be estimated at the moment with a sufficient degree of confidence.

39. SUBSEQUENT EVENTS (continued)

Impact of sanction risks (continued)

As at December 31, 2021, the Group had cash and cash equivalents and amounts due from credit institutions in various currencies with total amount of equivalent to 204,644 million tenge and borrowings of 522,915 million tenge at subsidiaries of Russian banks. As at the date of issue of these consolidated financial statements, cash and cash equivalents and amounts due from credit institutions held at subsidiaries of Russian banks equaled to 10,659 million tenge due to the transfer of funds to Kazakhstan banks. The transfer was made without any loss. As at the date of issue of these consolidated financial statements borrowings due to subsidiaries of Russian banks equaled 393, 948 million tenge.

Administrative offense in terms of environmental requirements

Based on the results of an audit conducted by the Department of Ecology of East Kazakhstan Region, on February 10, 2022 the Group received calculations, according to which administrative fine amounted to 18,516 million tenge under the protocol of administrative offense. As of April 8, 2022 the Group received an updated calculation of the administrative fine, which amounted to 10,470 million tenge.

The Group management does not agree with the calculation and considers the probability of confirming the calculations as unlikely. The Group began to challenge this administrative fine in the court.

Investment in Uranium Fund

On November 22, 2021, the Group signed a Framework Agreement with Genchi Global Limited to participate in ANU Energy OEIC Ltd (hereinafter − "ANU Energy"), created on the Astana International Financial Center (hereinafter – "AIFC"). The purpose of the ANU Energy is to store physical uranium as a long-term investment, the initial acquisition of which will be carried out through a joint investment of the founders of ANU Energy in the amount of 50 million US dollars. The Group's required capital contribution to ANU Energy is 24.5 million US dollars (equivalent to 12,368 million tenge) and this amount was paid in March 2022.

After the start of ANU Energy's operations, as part of the second stage of its development, it is expected to attract additional investments of up to 500 million US dollars from institutional and/or private investors through a public or private placement in order to purchase additional volumes of uranium. The parameters and timing of the placement will be determined by market conditions.

Also, in accordance with the *Framework Agreement*, the Group and ANU Energy signed a short-term contract for the sale and purchase of natural uranium concentrates, under which the Group will supply natural uranium concentrates no later than May 2022.

Damage of portable mooring devices 2 and 3 ("PMD-2" and "PMD -3") at the Caspian Pipeline Consortium ("CPC") Marine Terminal

On March 21, 2022, as a result of damage of PMD-2 and PMD -3 due to a severe storm in the Black Sea, oil loading at the CPC Marine Terminal (Novorossiysk) was completely stopped. Currently, oil is being shipped using PMD-1. The resumption of work in the normal mode of PMD-3 is expected in the near future and this will allow restoring the capacity of the CPC oil pipeline in full. Completion of restoration work at PMD-2 is planned after the resumption of operation of PMD-3.